



Student Poster Day

Road to Discovery

Summer Research Program

2005

Presentations by Students



Thursday, August 4, 2005
NIH Clinical Center



Office of Intramural Training and Education
National Institutes of Health
Department of Health & Human Services

NIH Summer Research Program Poster Day

Learning to communicate research findings is an essential part of a young scientist's development. Poster Day is intended to provide a forum for students in the NIH summer research programs to showcase their accomplishments before peers and the scientific community. We are happy to welcome these young researchers into an environment where the free exchange of ideas is vital to the advancement of science. They are to be congratulated on their achievements and encouraged to continue their preparation to become a part of the next generation of biomedical scientists. I would also like to salute their preceptors in our clinics and laboratories whose guidance and direction is crucial to the success of this program.



Michael M. Gottesman, MD

Deputy Director for Intramural Research
National Institutes of Health

Table of Contents

- 1 Center for Biologics Evaluation and Research, FDA (**CBER-OCTGT-DCGT**)
- 2 Center for Biologics Evaluation and Research, FDA (**CBER-OVRR DVP**)
- 3 Center for Biologics Evaluation and Research, FDA (**CBER-OVRR-DETTD**)
- 4 Center for Biologics Evaluation and Research, FDA (**CBER-OVRR-DH**)
- 5 Center for Information Technology (**CIT**)
- 6 National Cancer Institute Center for Cancer Research (**NCI-CCR**)
- 11 National Cancer Institute – Division of Cancer Epidemiology and Genetics (**NCI-DCEG**)
- 12 National Center for Complementary and Alternative Medicine (**NCCAM**)
- 13 National Eye Institute (**NEI**)
- 15 National Heart, Lung, and Blood Institute (**NHLBI**)
- 18 National Human Genome Research Institute (**NHGRI**)
- 20 National Institute of Allergy and Infectious Diseases (**NIAID**)
- 23 National Institute of Arthritis and Musculoskeletal and Skin Diseases (**NIAMS**)
- 25 National Institute of Child Health and Human Development (**NICHD**)
- 29 National Institute of Dental and Craniofacial Research (**NIDCR**)
- 30 National Institute of Diabetes and Digestive and Kidney Diseases (**NIDDK**)
- 33 National Institute of Environmental Health Sciences (**NIEHS**)
- 34 National Institute of Mental Health (**NIMH**)
- 38 National Institute of Neurological Disorders and Stroke (**NINDS**)
- 42 National Institute on Aging (**NIA**)
- 45 National Institute on Alcohol Abuse and Alcoholism (**NIAAA**)
- 46 National Institute on Deafness and Other Communication Disorders (**NIDCD**)
- 47 National Institute on Drug Abuse (**NIDA**)
- 50 National Library of Medicine (**NLM-LHNCBC**)
- 51 NIH Clinical Center (**CC**)
- 54 Office of the Director/Office of Intramural Research (**OD/OIR**)
- 55 Office of the Director/Office of Research Services (**OD/ORS**)
- 57 Index of Participants
- 61 Index of Educational Institutions of Participants

- **Morning Session**
9:30 a.m. – 11:30 a.m.
- **Afternoon Session**
12:30 p.m. – 2:30 p.m.

Morning Session

9:30 a.m. – 11:30 a.m.

Center for Biologics Evaluation and Research, FDA (**CBER-OCTGT-DCGT**)

Center for Biologics Evaluation and Research, FDA (**CBER-OVRR DVP**)

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National Eye Institute (**NEI**)

National Heart, Lung, and Blood Institute (**NHLBI**)

National Human Genome Research Institute (**NHGRI**)

National Institute of Allergy and Infectious Diseases (**NIAID**)

National Institute of Arthritis and Musculoskeletal and Skin Diseases (**NIAMS**)

National Institute of Dental and Craniofacial Research (**NIDCR**)

National Institute of Diabetes and Digestive and Kidney Diseases (**NIDDK**)

National Institute of Environmental Health Sciences (**NIEHS**)

Afternoon Session

12:30 p.m. – 2:30 p.m.

National Institute of Child Health and Human Development (**NICHD**)

National Institute of Mental Health (**NIMH**)

National Institute of Neurological Disorders and Stroke (**NINDS**)

National Institute on Aging (**NIA**)

National Institute on Alcohol Abuse and Alcoholism (**NIAAA**)

National Institute on Deafness and Other Communication Disorders (**NIDCD**)

National Institute on Drug Abuse (**NIDA**)

National Library of Medicine (**NLM-LHNCBC**)

NIH Clinical Center (**CC**)

Office of the Director/Office of Intramural Research (**OD/OIR**)

Office of the Director/Office of Research Services (**OD/ORS**)

Center for Biologics Evaluation and Research, FDA (CBER-OCTGT-DCGT)

I • Neel S. Talwar
*Expression, Purification, and
Characterization of Interleukin-13
Receptor Alpha 2*
Landon School
Hometown: North Potomac, MD
Dr. Mitomu Kioi, Preceptor
Laboratory of Molecular Tumor Biology

Center for Biologics Evaluation and Research, FDA (CBER-OVRR DVP)

2 • Simone E. Berkower

Vaccine-derived Poliovirus as a Model for the Evolution of RNA Viruses
Yale University
Hometown: Washington, DC
Dr. Elena Cherkasova, Preceptor
Laboratory of Method Development

3 • Abhinav Kumar

Development of Oligonucleotide Microchip for Monitoring Multi-drug Resistance in Malaria Parasites
Thomas S. Wootton High School
Hometown: Kensington, MD
Dr. Vladimir Chizhikov, Preceptor
Laboratory of Method Development

4 • Kelly W. Scarborough

Assembled Particles Bearing Cytokines for Enhanced Vaccine Potency
University of Florida
Hometown: Ozark, AL
Dr. Ira Berkower, Preceptor
Laboratory of Immunoregulation

5 • Kristin P. Viswanathan

Molecular Studies of Simian Foamy Retrovirus
Johns Hopkins University
Hometown: Derwood, MD
Dr. Arifa S. Khan,
Dr. Teresa A. Galvin, Preceptors
Laboratory of Retrovirus Research

Center for Biologics Evaluation and Research, FDA (CBER-OVRR-DETTD)

6 • Joseph G.Thumpasery

Studies on Nef Protein Expression

in HIV

St.Albans School

Hometown: Bethesda, MD

Dr. Andrew Dayton, Preceptor

Laboratory of Molecular Virology

Center for Biologics Evaluation and Research, FDA (CBER-OVRR-DH)

7 • Rachel Lieber

The Pathway of Von Willebrand Cleavage Protease – ADAMTS13 – in Human Cells
Charles E. Smith Jewish Day School
Hometown: Rockville, MD
Dr. Chava Kimchi-Sarfaty, Preceptor
Laboratory of Hemostasis

8 • Pooja N. Patel

Effects of Anthrax Toxin on Endothelium
Gaithersburg High School
Hometown: Gaithersburg, MD
Dr. Felice D Agnillo, Preceptor
Laboratory of Biochemistry and
Vascular Biology

9 • Aaron Shapiro

*The Activity and Function of
ADAMTS13 – Von Willebrand
Cleavage Protease – Polymorphisms*
Charles E. Smith Jewish Day School
Hometown: Rockville, MD
Dr. Chava Kimchi-Sarfaty, Preceptor
Laboratory of Hemostasis

Center for Information Technology (CIT)

10 • Giun Sun

Framework for a Comprehensive

Neuroscience Thesaurus

Radford University

Hometown: Dumfries, VA

Dr. Alex Wang, Preceptor

High Performance and Computing
and Informatics Office

National Cancer Institute Center for Cancer Research (NCI-CCR)

11 • Omolade O. Alawode

Use of RNA Interference in the Cell Lines Derived from Mammary Carcinomas in MMTV-neu Transgenic Mice
Glenelg Country School
Hometown: Columbia, MD
Dr. Curtis Harris,
Dr. Ana I. Robles, Preceptors
Laboratory of Human Carcinogenesis

12 • Diana E. Amarie

ASAP1 and Its Role in Bending Membranes
Eleanor Roosevelt High School
Hometown: Beltsville, MD
Dr. Paul Randazzo, Preceptor
Laboratory of Cellular Oncology

13 • Dipan Amin

Purification of Wnt Proteins
Damascus High School
Hometown: Clarksburg, MD
Dr. Jeffrey S. Rubin,
Dr. Farhana Feroze-Merzoug,
Preceptors
Laboratory of Cellular and Molecular Biology

14 • Benjamin A. Ashwell

Role of Barn32 in T-Cell Activation
Walter Johnson High School
Hometown: Bethesda, MD
Dr. Lawrence E. Samelson,
Dr. Connie L. Sommers, Preceptors
Laboratory of Cellular and Molecular Biology

15 • Holly K. Asmussen

The Role of Leptin in Breast Cancer Metastasis
University of Colorado
Hometown: Greeley, CO
Dr. Jeffrey E. Green,
Dr. Dalit Barkan, Preceptors
Laboratory of Cell Regulation and Carcinogenesis

16 • Nazanin Azizian

Potential Therapeutic Targets in Breast Cancer Brain Metastases: Validation and Functionality
George Washington University
Hometown: Springfield, VA
Dr. Julie L. Brondum, Preceptor
Molecular Targets Program

17 • Gregory O. Bascug

Synthesis and Optimization of a Thomsen-Friedenreich Disaccharide
Carnegie Mellon University
Hometown: Silver Spring, MD
Dr. Joseph J. Barchi, Preceptor
Laboratory of Medicinal Chemistry

18 • Jihane N. Benhammou

Regulation of Rps Translation by Small Non-coding RNAs
University of Texas at Austin
Hometown: Bethesda, MD
Dr. Susan Gottesman, Preceptor
Laboratory of Molecular Biology

19 • Kiran N. Bhat

Expression and Subcellular Distribution of the Chloride Channel Protein CLIC4 Is Altered in Human Epithelial Cancers and Tumor Cell Lines
Montgomery Blair High School
Hometown: North Potomac, MD
Dr. Kwang S. Suh,
Dr. Stuart H. Yuspa, Preceptors
Laboratory of Cellular Carcinogenesis and Tumor Promotion

20 • Chelsea M. Black

ABCB6, Co-localization, and Multidrug Resistance
Virginia Polytechnic Institute and State University
Hometown: Reston, VA
Dr. Jill Paterson,
Dr. Michael M. Gottesman, Preceptors
Laboratory of Cell Biology

21 • Kevin G. Blas

EGFR Expression in Burkitt's Lymphoma Cells
University of Michigan
Hometown: Derwood, MD
Dr. Alfred C. Johnson, Preceptor
Laboratory of Molecular Biology

22 • Daniel M. Breedlove

Evaluation of Cancer Susceptibility Genes in a Plasmacytoma Model
Virginia Polytechnic Institute and State University
Hometown: Laurel, MD
Dr. Beverly Mock,
Dr. Valery Bliskovsky, Preceptors
Laboratory of Genetics

23 • John R. Brooks

Inhibition of MAP3K8 and Its Effects on Taxol Resistance in Lung Cancer
Colgate University
Hometown: Washington, DC
Dr. Jonathan S. Wiest, Preceptor
Laboratory of Cellular Carcinogenesis and Tumor Promotion

24 • Leah R. Calvo

Searching for a 3' Splice-site Mutation to Account for Increased Production of Dominant Interfering FIR
Stanford University
Hometown: Washington, DC
Dr. David Levens, Preceptor
Laboratory of Pathology

25 • Jason L. Campbell

Flow Cytometric Detection of EBV-infected Cells
Georgetown Day School
Hometown: Washington, DC
Dr. Jeffrey Schrager,
Dr. Maryalice Stetler-Stevenson, Preceptors
Laboratory of Pathology

26 • Emily Capra
Topo-2 Inhibition in Yeast
Princeton University
Hometown: Mountain Lakes, NJ
Dr. Michael Lichten, Preceptor
Laboratory of Biochemistry

27 • Bonnie E. Carlson
Expression and Comparison of Biological Activity of Tnfrsf1b Allelic Variants
Yorktown High School
Hometown: Arlington, VA
Dr. Beverly Mock,
Dr. Valery Bliskovsky, Preceptors
Laboratory of Genetics

28 • David Chen
Visualization of Dictyostelium discoideum Life Cycle using GFP Technology
Thomas S. Wootton High School
Hometown: North Potomac, MD
Dr. Carole A. Parent,
Dr. Anna Bagorda, Preceptors
Laboratory of Cellular and Molecular Biology

29 • Christopher F. Chesley
A Pilot Study Evaluating Inhibition of the Mammalian Target of Rapamycin for the Chemoprevention of Tobacco Carcinogen-induced Lung Tumors in A/J Mice
Gaithersburg High School
Hometown: Gaithersburg, MD
Dr. Phillip Dennnis,
Ms. Courtney Granville, Preceptors
Cancer Therapeutics Branch

30 • Sarah J. Choyke
Targeting c-Met/HGF Pathways in Urologic Malignancies
Georgetown Day School
Hometown: Bethesda, MD
Dr. Donald P. Bottaro,
Dr. Pathirage G. Dharmawardana,
Preceptors
Urologic Oncology Branch

31 • Casey Coleman
Characterization of a Transgenic Mouse for mTOR/Frap Kinase
Cheltenham High School
Hometown: Rockville, MD
Dr. Beverly Mock,
Ms. Wendy du Bois, Preceptors
Laboratory of Genetics

32 • Luciann L. Cuenca
Characterization of Human Cancer Stem Cells
Catholic University of America
Hometown: Newark, NJ
Dr. Curtis Harris,
Dr. Lyuba Varticovski, Preceptors
Laboratory of Human Carcinogenesis

33 • David A. Germain, Erik Z. Li
Electron Tomography of SIV-infected T-cells: Semi-automated Extraction of Viral Surface Features
Winston Churchill High School
Montgomery Blair High School
Hometown: Potomac, MD
Rockville, MD
Dr. Sriram Subramaniam, Preceptor
Laboratory of Cell Biology

34 • Teresa Gomez
Identification of Differentially Expressed Transcripts between Vascular Mutant Cloche and Wildtype Zebrafish
California Academy of Mathematics and Science
Hometown: Rockville, MD
Dr. Ramani Ramchandran, Preceptor
Laboratory of Pathology

35 • Amrita Goyal
Cbl-dependent Trafficking of TRC-induced Signaling Complexes
Stone Ridge School of the Sacred Heart
Hometown: Derwood, MD
Dr. Lawrence E. Samelson,
Dr. Lakshmi Balagopalan, Preceptors
Laboratory of Cellular and Molecular Biology

36 • Rachelle L. Graham
Characterization of Non-melanoma Skin Cancer Stem Cells using Human Hair Follicle Keratinocyte "Stem Cell" Markers
Ferris State University
Hometown: Fremont, MI
Dr. Jonathan C. Vogel, Preceptor
Dermatology Branch

37 • Vernelle V. Grays
Is Skin a Reliable Measure of Tumor EGFR Inhibition?
Loyola College in Maryland
Hometown: Landover, MD
Dr. Elise C. Kohn,
Dr. Nana E. Tchabo, Preceptors
Laboratory of Pathology

38 • Sarah M. Greenblatt
Genetic Modification of a Whole Tumor Cell Based Vaccine for Enhanced Antitumor Efficacy
University of North Carolina
Hometown: Germantown, MD
Dr. James Hodge, Preceptor
Laboratory of Tumor Immunology and Biology

39 • Duc M. Ha
PRAC2: A New Gene Expressed in Human Prostate, Prostate Cancer, Rectum, and Distal Colon
University of Denver
Hometown: Denver, CO
Dr. Ira Pastan,
Dr. Tapan K. Bera, Preceptors
Laboratory of Molecular Biology

40 • Adam T. Jones
Investigation of the Prevalence of Polymorphisms 1236, 2677, and 3435 and Haplotype 1236-2677-3435 in the MDR1 Gene among Different Ethnic Populations
Amherst College
Hometown: Jeffersonton, VA
Dr. Michael M. Gottesman,
Dr. Chava Kimchi-Sarfaty, Preceptors
Laboratory of Cell Biology

41 • Carmella B. Kahn
Analyzing National Health Trends to Identify the Educational Needs of American Indians
University of Arizona
Hometown: Tucson, AZ
Dr. Roland Garcia, Preceptor
Center to Reduce Cancer
Health Disparities

42 • Nell Keith
Investigating the Fidelity of RNA Transcription
University of Oklahoma
Hometown: Tulsa, OK
Dr. Jeff Strathern, Preceptor
Gene Regulation and Chromosome Biology Laboratory

43 • Michael G. Kennedy
Antibody Selection for Nogo-66 Receptor Homolog NgR2 and NgR3 using Phage Display
University of Maryland
Hometown: Mount Airy, MD
Dr. Christoph Rader,
Dr. Thomas Hofer, Preceptors
Experimental Transplantation and Immunology Branch

44 • Itamar Kimchi
3D Reconstruction in Low-dose Electron Tomography
Massachusetts Institute of Technology
Hometown: Potomac, MD
Dr. Sriram Subramaniam, Preceptor
Laboratory of Cell Biology

45 • John Kot
ING3 Affects Proliferation of Various Cancer Cell Lines
New York Medical College
Hometown: Ansonia, CT
Dr. Sandra Pastorino, Preceptor
Neuro-oncology Branch

46 • Sally R. Lanar
The Use of a Bicistronic Selectable Retroviral Vector to Reverse the Molecular Defect of Canine Leukocyte Adhesion Deficiency in vitro
Montgomery Blair High School
Hometown: Takoma Park, MD
Dr. Dennis D. Hickstein,
Dr. Robert A. Sokolic, Preceptors
Experimental Transplantation and Immunology Branch

47 • Weiyu Li
Regulation of Ubiquitin Ligase smurf Expression in Mammary Epithelial Cells and Implications in Breast Cancer
Washington University, St. Louis
Hometown: Gaithersburg, MD
Dr. Chaoyang Jin,
Dr. Ying Zhang, Preceptors
Laboratory of Cellular and Molecular Biology

48 • Clifford M. Marks
Proteomic Analysis of Human Tumor Response to Perfused Chemotherapy in vivo, during Isolated Hepatic Perfusion (IHP)
Sidwell Friends School
Hometown: Bethesda, MD
Dr. Katherine R. Calvo, Preceptor
Laboratory of Pathology

49 • Nina D. Mastracci
Evaluation of Oocyte Regenerating Ovarian Stem Cells upon Interaction with the Mammary Stem Cell Niche
Michigan State University
Hometown: Troy, MI
Dr. Gilbert H. Smith, Preceptor
Mammary Biology and Tumorigenesis Laboratory

50 • Benjamin T. Mautner
Global Expression Profile of Kaposi's Sarcoma-associated Herpesvirus after Various Cytokine Treatments
St. Albans School
Hometown: Chevy Chase, MD
Dr. Steven L. Zeichner, Preceptor
HIV and AIDS Malignancy Branch

51 • Olive Mbah, Lyn Wancket, Rita Salloum
Evaluating Angiogenic Response in Tissue Inhibitors of Metalloproteinase (TIMP) Knock-out Mice
University of Maryland
University of Illinois
Albright College
Hometown: Bowie, MD
Urbana, IL
Rockville, MD
Dr. William Stetler-Stevenson, Preceptor
Cell and Cancer Biology Branch

52 • Anudeep Mukkamala
Detection of HHV8-positive Primary Effusion Lymphomas (PELs) by Flow Cytometry
Grand Blanc High School
Hometown: Grand Blanc, MI
Dr. Maryalice Stetler-Stevenson,
Dr. Jeffrey Schrager, Preceptors
Laboratory of Pathology

53 • Alison A. Murphy
Over-expression of BAG-3 Alters Quantity and Localization of Beta-catenin
Glenelg Country School
Hometown: Ellicott City, MD
Dr. Jareer Kassis,
Dr. Elise C. Kohn, Preceptors
Laboratory of Pathology

- 54 • Jean Y. Park**
The Link between SIRT 6 Activity and Adipocyte Differentiation
 Winston Churchill High School
 Hometown: Potomac, MD
 Dr. Izumi Horikawa,
 Dr. Eriko Michishita, Preceptors
 Laboratory of Biosystems and Cancer
- 55 • Alexandra T. Pinckney**
Validation of the Expression of Candidate Oncogenes at Common MMTV Integration Sites by RT-PCR
 Abington Senior High School
 Hometown: Rydal, PA
 Dr. Gilbert H. Smith,
 Dr. David Mack, Preceptors
 Mammary Biology and Tumorigenesis Laboratory
- 56 • Holly A. Porter**
Proteins Involved in Post-transcriptional Control of IFN-gamma
 Rutgers University
 Hometown: Baltimore, MD
 Dr. Howard Young,
 Dr. Deborah L. Hodge, Preceptors
 Laboratory of Experimental Immunology
- 57 • Margaret R. Pruitt**
Functional Analysis of Polymorphic Variants in the mTOR (Frap) Promoter
 Stone Ridge High School
 Hometown: Silver Spring, MD
 Dr. Beverly Moch,
 Dr. Wei Shi, Preceptors
 Laboratory of Genetics
- 58 • Ziba Razinia**
Study of Enzastaurin Effect on Human Glioma Cell Lines
 California State University, Northridge
 Hometown: Los Angeles, CA
 Dr. Howard Fine, Preceptor
 Neuro-oncology Branch
- 59 • Brittany A. Rolle**
Apoptotic Topoisomerase I-DNA Complexes: A General Feature of Programmed Nuclear Dismantling
 Royal Palm Beach Community High School
 Hometown: West Palm Beach, FL
 Dr. Olivier Sordet,
 Dr. Yves Pommier, Preceptors
 Laboratory of Molecular Pharmacology
- 60 • Giselle Roman**
Epidermal Growth Factor Receptor Expression during Neural Cell Differentiation
 University of Puerto Rico
 Hometown: Yauco, PR
 Dr. Alfred C. Johnson, Preceptor
 Laboratory of Molecular Biology
- 61 • Andre D. Rosario**
Accelerated Plasma Cell Tumors in iMyc Gene-insertion Mice
 Woodrow Wilson Senior High School
 Hometown: Bethesda, MD
 Dr. Siegfried Janz, Preceptor
 Laboratory of Genetics
- 62 • Matthew W. Ross**
Proteomic Pattern Identification of Melanoma in Serum Samples
 James Madison University
 Hometown: Ashburn, VA
 Dr. Gordon Whiteley, Preceptor
 Laboratory of Pathology
- 63 • Cheryl Saddler**
The Development of a Protocol for the Immortalization of a Canine B Cell Line
 Royal Palm Beach Community High School
 Hometown: Loxahatchee, FL
 Dr. Melissa Paoloni,
 Dr. Chand Khanna, Preceptors
 Pediatric Oncology Branch
- 64 • Zalya Sanchez-Galvan**
Genetic and Environmental Risk Factors in Relation to p53 Mutations in Breast Tumors
 University of California, Los Angeles
 Hometown: Santa Ana, CA
 Dr. Stefan Ambs, Preceptor
 Laboratory of Human Carcinogenesis
- 65 • David S. Scavo**
Multidrug Resistance (MDR1) Polymorphisms in U.S. Population
 Georgetown University
 Hometown: Bethesda, MD
 Dr. Michael M. Gottesman,
 Dr. Chava Kimchi, Preceptors
 Laboratory of Cell Biology
- 66 • Heather M. Selby**
Receptor Targeted Optical Imaging of HER-2 Positive Tumors in Cancer Xenografts using Affibody
 Illinois Institute of Technology
 Hometown: Barrington, IL
 Dr. Jacek Capala,
 Dr. Sang-Bong Lee, Preceptors
 Radiation Oncology Branch
- 67 • Manjool M. Shah**
Analysis of Structure and Morphology of HIV-infected Macrophages using Electron Tomography
 University of Pennsylvania
 Hometown: Latham, NY
 Dr. Sriram Subramaniam, Preceptor
 Laboratory of Cell Biology
- 68 • Alexander N. Shoushtari**
Effect of Bevacizumab and Chemotherapy on Serum Levels of sVCAM-1 in Patients with Inflammatory and Locally Advanced Breast Cancer
 Rush Medical College
 Hometown: Washington, DC
 Dr. Sandra M. Swain,
 Dr. Neelima Denduluri, Preceptors
 Cancer Therapeutics Branch

69 • John K. Simmons
Mutational Analysis of TUSCI, a Candidate Tumor Suppressor Gene, in Cancer
American University
Hometown: Buffalo Junction, VA
Dr. Jonathan S. Wiest, Preceptor
Laboratory of Cellular Carcinogenesis and Tumor Promotion

70 • Lakeisha E. Summers
Detection of HIV-specific Mucosal Antibodies in Vaccinated Chimpanzees
Claflin University
Hometown: Hepzibah, GA
Dr. Marjorie Robert-Guroff,
Dr. Thorsten Demberg, Preceptors
Basic Research Laboratory-Bethesda

71 • Erin M. Taylor
Characterization of Prolactin Receptor Isoform Antibodies
University of Michigan
Hometown: Vienna, VA
Dr. Barbara K. Vonderhaar, Preceptor
Mammary Biology and Tumorigenesis Laboratory

72 • Victoria L. Tkacz
Determination of CC-5013, an Analogue of Thalidomide, in Human Urine by Liquid Chromatography/Mass Spectrometry
Ohio State University
Hometown: Mayfield Heights, OH
Dr. William D. Figg,
Dr. Tanyifor Tohnya, Preceptors
Medical Oncology Clinical Research Unit, MOP

73 • Thuy T. Tran
Inhibition of Hsp90 Enhances Radiosensitivity of Human Cancer Cell Lines
College of Saint Mary
Hometown: Rockville, MD
Dr. Curtis Harris,
Dr. Lyuba Varticovski, Preceptors
Laboratory of Human Carcinogenesis

74 • Nancy J. Tray
Helicase Cloning in the Drosophila RNAi Pathway
Johns Hopkins University
Hometown: Fairfax, VA
Dr. Bruce M. Paterson, Preceptor
Laboratory of Biochemistry

75 • Carlos A. Tristan
Mechanism of Tumor Sensitization by Proteasome Inhibitor Bortezomib to Death Receptor-mediated Killing
California State University, Fresno
Hometown: Oxnard, CA
Dr. Thomas J. Sayers,
Dr. Anil Shanker, Preceptors
Laboratory of Experimental Immunology

76 • Alice (Yu-Ting) Tsai
The Role of Molecular Motor HKIF4A in Tumor Formation
University of California, San Diego
Hometown: Castro Valley, CA
Dr. Tom Misteli,
Dr. Manjari Mazumdar, Preceptors
Laboratory of Receptor Biology and Gene Expression

77 • Carla V. Valenzuela
Localizing a Specific Gene and Its Binding Proteins in Mammalian Cells by Lac Operator/Lac Repressor Reporter System
Martin Luther King Academic Magnet
Hometown: Nashville, TN
Dr. Mirit Aladjem, Preceptor
Laboratory of Molecular Pharmacology

78 • Mamata Venepally
In vitro characterization of CbpM, a Modulator of a Dnaj (HSP40) Homologue and Component of the DnK (HSP70) Chaperone System
University of Maryland
Hometown: Boyds, MD
Dr. Sue Wickner, Preceptor
Laboratory of Molecular Biology

79 • Reginald L. Williams
Autopsy Study Series: The Human Vitreous Proteome
George Washington University
Hometown: Gaithersburg, MD
Dr. Amy V. Rapkiewicz, Preceptor
Laboratory of Pathology

80 • Hailiu Yang
Validation of ER Positive and Negative Mammary Tumor Gene Expression Data by Real Time PCR
Montgomery Blair High School
Hometown: Potomac, MD
Dr. Jeff Green,
Dr. Tinghu Qiu, Preceptors
Laboratory of Cell Regulation and Carcinogenesis

81 • Bixi Zeng
Regulation of Nitric Oxide on ER Stress in Vascular Smooth Muscle Cells
University of Maryland
Hometown: Bethesda, MD
Dr. David D. Roberts, Preceptor
Laboratory of Pathology

National Cancer Institute – Division of Cancer Epidemiology and Genetics (NCI-DCEG)

82 • Susan Combs

HHV-8 Viral and Antibody Profiles in Patients with Kaposi's Sarcoma in Uganda
University of Oxford
Hometown: Bethesda, MD
Dr. Sam Mbulaiteye, Preceptor
Viral Epidemiology Branch

83 • Hozefa A. Divan

Using a Geographic Information System (GIS) to Evaluate Environmental Exposures to Industrial Releases and Risk of Non-Hodgkin's Lymphoma (NHL)
University of California, Los Angeles,
School of Public Health
Hometown: Los Angeles, CA
Dr. Mary Ward, Preceptor
Occupational and Environmental Epidemiology Branch

84 • Julia W. Gray

A Study of an Environmental Exposure to DDT in Tiana, Alabama: Looking at Health Outcomes and Factors that Relate to Changes in Body Burden of DDT
University of Michigan School of Public Health
Hometown: Ann Arbor, MI
Dr. Aaron Blair, Preceptor
Occupational and Environmental Epidemiology Branch

85 • Lindsey M. Hoskins

Evolution of the Colored Eco Genetic Relationship Map (CEGRM) for Assessing Social Functioning in Women in Hereditary Breast-ovarian Cancer (HBOC) Families
University of Maryland
Hometown: Bethesda, MD
Ms. June A. Peters, Preceptor
Clinical Genetics Branch

86 • Regan A. Howard

Merkel Cell Carcinoma and Multiple Primary Cancers
George Washington University
Hometown: Arlington, VA
Dr. Lois B. Travis, Preceptor
Radiation Epidemiology Branch

87 • Sara Khaghani

Dyskeratosis Congenita – NCI Cohort
University of California, Los Angeles
Hometown: Pleasanton, CA
Dr. Neelam Giri,
Dr. Blanche Alter, Preceptors
Clinical Genetics Branch

88 • Zhao E. Lan

Familial and Genetic Risk Factors for Non-Hodgkin's Lymphoma
Winston Churchill High School
Hometown: Potomac, MD
Dr. Sophia S. Wang, Preceptor
Hormonal and Reproductive Epidemiology Branch

89 • Alexis Lebron

Association of the CYP17 Gene Polymorphism with the Risk of Prostate Cancer in a Group of Male Smokers
University of Maryland
Hometown: Bethesda, MD
Dr. Demetrius Albanes,
Dr. Margaret Wright, Preceptors
Nutritional Epidemiology Branch

90 • Rebecca Z. Pass

Association of Human Single Nucleotide Polymorphisms with Clearance of Hepatitis C Virus in Injection Drug Users
Stanford University
Hometown: Chevy Chase, MD
Dr. Thomas O'Brien,
Dr. Beth Brown, Preceptors
Hormonal and Reproductive Epidemiology Branch

National Center for Complementary and Alternative Medicine (NCCAM)

91 • Joyce M. Koh

Parameters of Cellular and Humoral Immunity in Cancer Patients Treated with Mistletoe Extract and Gemcitabine
Pennsylvania State University College of Medicine

Hometown: Hershey, PA

Dr. Patrick J. Mansky, Preceptor
Office of the Scientific Director for Clinical Research

92 • Ginger Polich

Regulation of Monoamine Oxidase (MAO) by Adrenal-, Gonadal- and Neurosteroids in Human Fetal Astrocytes: Implications for Mind-body Interactions during Stress
Amherst College
Hometown: Ironwood, MI
Dr. Marc Blackman,
Dr. Irini Manoli, Preceptors
Laboratory of Clinical Investigation

93 • Lavanya Viswanathan

Prostate Stromal Cells Modulate DHEA-induced PSA Production in Prostate Cancer Epithelial Cells
Georgetown University
Hometown: Lutherville, MD
Dr. Julia T. Arnold,
Dr. Marc Blackman, Preceptors
Laboratory of Clinical Investigation

National Eye Institute (NEI)

94 • Natalia A. Balko

Structure-function Relationships of a Receptor for Pigment Epithelium-derived Factor
Princeton University
Hometown: Bethesda, MD
Dr. Patricia Becerra, Preceptor
Laboratory of Retinal Cell and Molecular Biology

95 • Patrick Chaing

Regulation of the Trafficking of Two Membrane Proteins (MIP/AQPO and MP19) from the Lens by Signaling Transduction Pathways
Princeton University
Hometown: Lower Gwynedd, PA
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96 • Megan E. Conroy

Characterizing BCM02: The Newest Addition to a Family of Polyene Chain Oxygenases
Gaithersburg High School
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97 • Marlen Diaz

Antiangiogenic Effects of PEDF Peptides
California Academy of Mathematics and Science
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98 • Benjamin Korman

Molecular and Mechanistic Approaches to Protect Ocular Tissues from Damage Induced by Inflammation
Ohio State University College of Medicine and Public Health
Hometown: Moreland Hills, OH
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99 • Anna W. Liebowitz

Investigating the Role of Bone Marrow Stem Cells in Angiogenesis
Benjamin Banneker Academic High School
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100 • Vanessa Montalvo

Immune Mediators' Involvement in Retinal Damage: The Good and the Bad
Howard University
Hometown: Fort Washington, MD
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101 • Denise L. Mooney

A Proteomic Analysis of a Mouse Melanoma Tumor Cell Line with Downregulated DCF Expression
George Washington University
Hometown: Bethesda, MD
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Mr. David Culp, Preceptors
Protein Biochemistry Section

102 • David Rawnley

Possible Functions of Secreted Glycoprotein Olfactomedin
Duke University
Hometown: Melrose, MA
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Dr. Naoki Nakaya, Preceptors
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103 • Azize Sahin

Common Genetic Determinants of Uveitis and Other Autoimmune Disorders
University of Maryland
Hometown: Seabrook, MD
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Laboratory of Immunology

104 • Sonia R. Samtani,

Rajeev Samtani
A Hereditary Cataract in which Glutathione Concentration in the Lens Is Not Decreased
Holton-Arms School
St. Stephen's and St. Agne's School
Hometown: Potomac, MD
Potomac, MD
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Lens and Cataract Biology Section

105 • Kristin L. Schmid

Senescence and Proliferation Rates of Primary Endothelial Progenitor Cell Lines Derived from Patients with Age-related Macular Degeneration (AMD) and Control Patients
Loma Linda University School of Medicine
Hometown: Colton, CA
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106 • Sonia Sekhar

Expression and Immunochemical Characterization of Human Stearyl-CoA Desaturase
Barnard College
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107 • Pooja Sharma

Suppression of Citrate Synthase Aggregation: A Biochemical Analysis
Drexel University College of Medicine
Hometown: Easton, PA
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108 • Di Sun

Site-specific Mutation of c-Src for Studies of Cdk5-dependent Phosphorylation
Richard Montgomery High School
Hometown: Boyds, MD
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109 • Erin Walsh

The Effects of Temperature on RNA Silencing of Myocilin – A Gene Associated with Glaucoma
New York Medical College
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Aging and Ocular Disease Section

110 • Siyuan Wang

Designing a Diagnostic Test for Antiretinal Autoantibodies
Thomas S. Wootton High School
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Dr. John Hooks, Preceptors
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111 • Suzanne H. Westbrook

Silencing C-FLIP Gene Expression in Human ARPE-19 Cells by shRNA-mediated RNA Interference
Princeton University
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112 • Qing Yan

The Lack of Beneficial Prevention in Cardiovascular Disease in Women in the Early Treatment Diabetic Retinopathy Study
University of Maryland
Hometown: Kensington, MD
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113 • Jesse X. Yang

12-Lipoxygenase Expression in the Eye
Thomas Jefferson High School for Science and Technology
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National Heart, Lung, and Blood Institute (NHLBI)

114 • Daniel E. Ashley

Gene Expression Profiling of the Cyclic AMP Pathway, as it Relates to the Cystic Fibrosis Gene CFTR
California Academy of Mathematics and Science
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115 • David J. Auerbach

Studying Biological Samples through Atomic Force Microscopy
Cornell University
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116 • Jeannette M. Beasley

Association between Macronutrient Intake and Weight Change: The CARDIA Study
Johns Hopkins University
Hometown: Baltimore, MD
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117 • Justin S. Brandt

Reactive Oxygen Species (ROS)-induced Mitochondrial DNA Mutations in Jurkat T Cell Line
Columbia University
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Hematology Branch

118 • Nicholas E. Bruns

Alteration of Mitochondrial Distribution by a Complex I Protein Subunit
St. Albans School
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119 • Christine A. Buras

The Interaction of Fis1 Protein in Mitochondrial Fission
National Cathedral School
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120 • Guangyu Cao

Actin Velocity with Varying Concentrations of Different Myosin
University of Maryland
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121 • Elaine Chan

Control of Neuronal Guidance with Proteoglycans
Rice University
Hometown: Sugar Land, TX
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Dr. Hang Wang, Preceptors
Developmental Neurobiology Group

122 • Chelsea L. Ellis

Prognostic Factors for Clinical Restenosis in the Cardiogene Study
University of Florida
Hometown: Orlando, FL
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Bioinformatics Core

123 • Edwin J. Garcia-LaTorre

Phenotypic Analysis of a New Mouse Model of Holt-Oram Syndrome
University of Puerto Rico School of Medicine
Hometown: Trujillo Alto, PR
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124 • Daniel Groepper

Novel Pixel by Pixel Statistical Analysis of 2-D DIGE Images
Iowa State University
Hometown: Iowa City, IA
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125 • Rozalina Grubina

Potential Markers of Successful Human Stem Cell Mobilization
Johns Hopkins School of Medicine
Hometown: Baltimore, MD
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126 • Stefanie L. Hartman

Fluorescent Analysis of the Stoichiometry and Assembly of HIV-1 Integrase
Virginia Polytechnic Institute and State University
Hometown: Frederick, MD
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Dr. Kristi Poulin, Preceptors
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127 • Charisse O. Henry

Organic Synthesis of Dimethoxypyrrone and Characterization of Its Reactivity with Peptides and Amines
Brown University
Hometown: Upper Marlboro, MD
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128 • Lisa C. Ji

Determination of Mouse Body Fat and Whole Body Mass Composition by using High-resolution Micro-CT in Addition to Standard Analytical Methods
Richard Montgomery High School
Hometown: Gaithersburg, MD
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Dr. Silvia Santamarina-Fojo, Preceptors
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129 • Jimmy Johannes

Aortic Distensibility and Pulse Wave Velocity by Cardiac MRI
Northwestern University
Hometown: San Marino, CA
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Dr. Andrew Arai, Preceptors
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130 • Reva Kakkar

Proteomic Quantification of Vasopressin-induced Cytosol-membrane Protein Translocation in the Renal Collecting Duct
Rice University
Hometown: Houston, TX
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131 • Sarah N. Kim

Mitochondrial Targets of Sirt3
North Carolina State University
Hometown: Candler, NC
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Cardiovascular Branch

132 • Ji Heon Kim

Identifying NRSF/REST Target Genes in Drosophila using an RNAi-based Screening in Drosophila Tissue Culture
Carnegie Mellon University
Hometown: Clarksburg, MD
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133 • Pramukta Kumar

Automatic Tracking of Fluorescent Speckle Microscopy Data
Georgetown University
Hometown: Bethesda, MD
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134 • Yaojie J. Li

Search for Transcriptional Regulatory Elements for Nonmuscle Heavy Chain IIC Gene
University of Maryland
Hometown: Gaithersburg, MD
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135 • Benjamin S. Mantell

Restoring Mitochondrial Integrity in the Insulin Resistant State
Brown University
Hometown: Bridgewater, NJ
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Dr. Ines Pagel, Preceptors
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136 • James R. McAuley

The Effects of Cytosolic Inorganic Phosphate on the Mitochondrial Proteome
Swarthmore College
Hometown: Mclean, VA
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137 • Thomas E. McCann

Chondroitin 4-Sulfotransferases and Their Effect on Neuron-astrocyte Interactions
Northeastern University
Hometown: Franklinville, NJ
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Dr. Yasuhiro Katagiri, Preceptors
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138 • Laura Myers

Enhancement of Iron Particle Uptake in Human Hematopoietic Stem Cells via Antibody-antigen Binding
Dartmouth College
Hometown: Gansevoort, NY
Dr. Cynthia Dunbar, Preceptor
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139 • Quang Nguyen

Evaluation and Development of the "Mucus Slurper:" An Endotracheal Tube Allowing Timed Aspiration of Tracheal Secretions
University of Michigan
Hometown: Safety Harbor, FL
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Pulmonary Critical Care Medicine Branch

140 • Jonathan V. Nguyen

Agrin Constructs for Detection with Biarsenical Fluorescent Reagents in Neurons
University of Pennsylvania
Hometown: Rockville, MD
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Dr. Seumas McCroskery, Preceptors
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141 • Cuong T. Nguyen

Analysis of IMCD Intracellular Nitric Oxide Responses by DAF-2DA
University of Maryland,
Baltimore County
Hometown: Baltimore, MD
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142 • Johnny Pang

Indications and Patient Characteristics for the Contrast-enhanced Cardiac MRI in NIH-Suburban Hospital 2001-2005
Midwood High School
Hometown: Brooklyn, NY
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Dr. Jie J. Cao, Preceptors
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143 • Arti Parekh

Activation of Nonmuscle Myosin II during Neuron Migration
Barrie School
Hometown: Silver Spring, MD
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144 • Gopal A. Patel

Tissue Autofluorescence in Rapid 3D Imaging using Episcopic Fluorescence Image Capturing
University of Medicine and Dentistry of New Jersey
Hometown: Bedminster, NJ
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145 • Mary Ella C. Pruitt
Fluorescence Immunoblotting
St. Mary's College of Maryland
Hometown: Ashton, MD
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Ms. Patricia A. Gonzales, Preceptors
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146 • Erin M. Quist
*Craniofacial and Axial Skeletal Defects
in a Mouse Mutant with a p53
Binding Protein Mutation*
Colorado State University
Hometown: Tucson, AZ
Dr. Cecilia Lo, Preceptor
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147 • David Rogawski
*The Prion Protein Protects against
Harmful Aggregation of Huntington*
Williams College
Hometown: Columbia, MD
Dr. Lois Greene,
Dr. Kyung Jin Lee, Preceptors
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148 • Katherine E. Sinele
*Automatic Masking and Phase
Unwrapping of DENSE Cardiac
Motion Images in Humans*
Mississippi State University
Hometown: Flora, MS
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149 • Rishi Singh
*A World Wide Web Interface to
the CHARMM Computational
Chemistry Program*
Hayfield Secondary
Hometown: Fairfax Station, VA
Dr. Bernard R. Brooks,
Dr. Jeffery Klauda, Preceptors
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150 • Jennifer Sipics
*Cell Growth on Micropatterned
Substrates*
Stevens Institute of Technology
Hometown: Allentown, PA
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151 • Tanuj K. Sood
*Changes in NADH Fluorescence in
Fast Twitch and Slow Twitch Skeletal
Muscle Fibers*
Gaithersburg High School
Hometown: Gaithersburg, MD
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152 • Edgardo Sosa
*TCRVb Allele Frequencies in T Cells
are Largely Determined during
beta-Selection*
State University of New York at Albany
Hometown: Albany, NY
Dr. John Barrett,
Dr. Jos Melenhorst, Preceptors
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153 • Karis R. Tang-Quan
*The Origin of Endothelial Progenitors
in Vascular Repair: A Lineage
Tracking Approach*
Palos Verdes Peninsula High School
Hometown: Rancho Palos Verdes, CA
Dr. Manfred Boehm,
Dr. Andrew Wragg, Preceptors
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154 • Dmitry Tchapyjnikov
*Renal Inner Medullary Collecting
Duct Proteome Database*
Emory University
Hometown: Silver Spring, MD
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Metabolism

155 • Joel W. Thomas
*RNAi Myosin V Knockdown and Cell
Synchronization in Drosophila S2 Cells*
University of North Carolina
Hometown: Chapel Hill, NC
Dr. James Sellers,
Dr. Judit Toth, Preceptors
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156 • Daniel A. Weisz
*A New Look at Rhizocaline, the Elusive
Plant Root-promoting Cofactor*
Charles E. Smith Jewish Day School
Hometown: Silver Spring, MD
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157 • Brian W. Wu
*ABCG1 Transporter Gene Expression
during Differentiation of 3T3-L1
Preadipocytes*
University of Maryland
Hometown: Potomac, MD
Dr. Steven L. Sabol,
Dr. Silvia Santamarina-Fojo, Preceptors
Molecular Disease Branch

158 • Zhongjia Yang
*Blood Pressure Measurement in
HGPS Mutation Mice*
Winston Churchill High School
Hometown: Potomac, MD
Dr. Hong San, Preceptor
Cardiovascular Branch

159 • Victoria Yao
Chromatin Structure and Gene Regulation
Montgomery Blair High School
Hometown: Silver Spring, MD
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160 • George S. Zaidan
*Quantitation of Methionine Sulfoxide
Residues in Proteins*
Massachusetts Institute of Technology
Hometown: Bethesda, MD
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161 • Susan P. Bothwell

Mitochondrial Electron Transport Chain Activity in Mouse Brain
Lafayette College
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162 • Elizabeth Cline

Developing Chemical Compounds Specifically Blocking the Interaction of the Leukemia-associated Fusion Protein CBFb-SMMHC and Runx 1
College of William and Mary
Hometown: Reston, VA
Dr. Paul Liu,
Ms. Sheila T. Compton, Preceptors
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163 • Dina A. Faddah

Characterization of a Mouse Model for Hutchinson-Gilford Progeria Syndrome
University of North Carolina
Hometown: Raleigh, NC
Dr. Francis Collins, Preceptor
Genome Technology Branch

164 • Elizabeth H. Finn,

Katherine H. Zhang
Two Developmental Mouse Mutants from an ENU Screen
University of Chicago
Montgomery Blair High School
Hometown: Silver Spring, MD
Gaithersburg, MD
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165 • Elissa Gerfen

Comparative Analysis of the Pericentromeric Region of the Primate X Chromosome
Walt Whitman High School
Hometown: Bethesda, MD
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Dr. Mary Schueler, Preceptors
Genome Technology Branch

166 • Daozhong Jin

Comparing European and American Canine Populations using SNplex
University of Maryland
Hometown: Rockville, MD
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Cancer Genetics Branch

167 • Jolinta Y. Lin

Analysis of Barrier Elements Surrounding the Mammalian Beta-globin Locus
Massachusetts Institute of Technology
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168 • Stephanie E. Miller

Ocular Abnormalities in Smith Magenis Syndrome
University of Maryland, Baltimore County
Hometown: Silver Spring, MD
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Dr. Libe Gradstein, Preceptors
Office of the Clinical Director

169 • Amanda J. Morris

GFP-based Studies on Nuclear Localization of GNE in Hereditary Inclusion Body Myopathy
Massachusetts Institute of Technology
Hometown: North Potomac, MD
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170 • Elisa M. Nabel

Investigations of the Familial Inheritance of Lenz Microphthalmia
National Cathedral School
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171 • Ashley N. Owen

The Function of The DNase I Sensitive Chromatin Domain Containing the Erythroid Ankyrin Promoter
Elizabethtown College
Hometown: Gaithersburg, MD
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172 • Erin M. Parry

Structure-function Analysis of the Mouse Band-3 Gene
Colby College
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173 • Garima Srivastava

Lysosomal Storage Disorder
Eleanor Roosevelt High School
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174 • Bobby M. Thomas

Characterizing Bloodless Zebrafish Mutants from an ENU Mutagenesis Screen
Springbrook High School
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Dr. Milton A. English, Preceptors
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175 • Megan Truitt
*Through the Viewfinder:
Reflections on Positive Exposure*
Salisbury University
Hometown: Millersville, MD
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Ms. Erica Sutton, Preceptors
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176 • Amy Wasterlain
*Glycyl-tRNA Synthetase Mutations
in Peripheral Neuropathy*
Princeton University
Hometown: Brooklyn, NY
Dr. Eric Green,
Dr. Anthony Antonellis, Preceptors
Genome Technology Branch

177 • Dan E. Webster
*Gene Therapy and the Retroviral Bias:
Preferred Targeting of Transcription
Start Sites Is Compatible with Long-term,
Event-free Survival of Gene Corrected
T-Cells in vivo*
University of Wisconsin
Hometown: Madison, WI
Dr. Fabio Candotti, Preceptor
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178 • Carmen B. Arze

Searching for a Cure: A Phase II Study of Bevacizumab in HIV Patients with Kaposi's Sarcoma
Towson University
Hometown: Germantown, MD
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179 • Sachini N. Bandara

Analysis of the Ability of Activating Mutations and Splice Variants of Critical Signaling Molecules to Modulate Antigen-mediated Mast Cell Activation
University of California, Berkeley
Hometown: Stevenson Ranch, CA
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180 • Lauren B. Banks

Cloning and Sequencing of the Surface Glycoproteins from an Influenza Vaccine Strain A/ Ann Arbor/ 6/ 60
Stanford University
Hometown: Potomac, MD
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181 • Maria N. Beckford

Variable Distribution of Chemokine Receptors in Leukocyte Subsets
Lower Merion High School
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Ms. Gina Purinton, Preceptors
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182 • Kasima Brown, Victor Zhu

Growth Dynamics of Plasmodium falciparum Autotrophic Mutant Parasites
Northfield Mount Hermon School
Thomas Jefferson High School for Science and Technology
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Arlington, VA
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183 • Lecia A. Brown

Co-localization of RGS-13 and CREB
Suncoast High School
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Dr. Zhihui Xie, Preceptors
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184 • Yun-Yun K. Chen

Analyzing the Expression of mRNAs for Orphan G-Protein Coupled Receptors and Monocytes using Taqman
Thomas S. Wootton High School
Hometown: North Potomac, MD
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Dr. Merav Darash-Yahana, Preceptors
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185 • Daniel Chien

The Effect of Plasma from Filaria Infection Patients on Histamine Release from Basophils
University of California, Los Angeles
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186 • Danielle L. Colley

HIV-1 Nef Disrupts Traffic of HLA A2
University of Maryland
Hometown: Frederick, MD
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187 • Maureen Cox

T-Cell Differentiation with TLR Costimulation
University of California, Davis
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188 • Adolfo A. Cuesta

Differential Gene Expression in CD25- versus CD25+/Regulatory (Treg) CD4+ Memory T-cells Isolated from the Peripheral Blood of HIV-infected and -uninfected Individuals
Regis High School
Hometown: Bronx, NY
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189 • Christine R. DeLong

Constitutive Expression of Toll-like Receptors in Eosinophils and Implications for Their Role in Innate Immunity
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Hometown: Arnold, MD
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190 • Wei-Li Deng

Using Gel Filtration Chromatography for Large Scale Purification of Milk Proteins
University of Connecticut
School of Medicine
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Dr. Polly Matzinger, Preceptors
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191 • Brian D. Herman
Real Time PCR Analysis of Cytokine Responses to a Mouse-adapted SARS Coronavirus Infection
Allegheny College
Hometown: Valencia, PA
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192 • Shivkumar Kambhampati
Selection of Mutations in PSAC, a Nutrient Channel on Human RBCs Infected with Plasmodium falciparum
George Washington University
Hometown: Columbia, MD
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193 • Sarah C. Kennedy
Induction of Chemokines through Stimulation of Toll-like Receptors
Ursinus College
Hometown: Randolph, NJ
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194 • Katherine S. Larabee
The Role of the Unique alpha-1 Domain Disulfide in the Stability of Murine Cytomegalovirus MHC-I Like Molecule m144
Williams College
Hometown: Ellicott City, MD
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195 • Danielle R. Large
Delineation of the Mechanisms of Persistence of HIV in Infected Patients Receiving Effective Long-term Antiretroviral Therapy
Alderson-Broaddus College
Hometown: Slatyfork, WV
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196 • Ning Lu
Epitope Position in Envelope Protein and Antibody Properties that Affect Retroviral Neutralization Potency
University of Maryland
Hometown: Boyds, MD
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Dr. Wu Ou, Preceptors
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197 • Marisa-Claire Mumford
Fusion with Mistic Protein as a Strategy for Membrane Expression of the Murine Natural Killer Cell Receptor ly49A for Structural Studies
Whitman College
Hometown: Bellevue, WA
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198 • Josh P. Owings
A Unique Secretory Invertase Is Functionally Conserved among Pathogenic Species of Leishmania
St. Mary's College of Maryland
Hometown: Phoenix, MD
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Dr. Manju Joshi, Preceptors
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199 • Michael J. Paskow
Serum Antibody Levels as an Early Indicator of Disease in a Mouse Model of Autoimmune Gastritis
Cornell University
Hometown: Potomac, MD
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Dr. Ditzia Levin, Preceptors
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200 • Alanna C. Peterson
Measurement of T Cell Responses in Hemophilia: A Mouse Model after Factor VIII Infusions
San Jose State University
Hometown: San Jose, CA
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201 • Steven J. Quinn
Cloning and Expression of Varicella-Zoster Virus (VZV) Glycoproteins gE and gM
University of Virginia
Hometown: Great Falls, VA
Dr. Qingxue Li,
Dr. Jeffrey Cohen, Preceptors
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202 • Brook E. Ragle
Incorporation of His and Flag Tags in Nonstructural Proteins of Human Respiratory Syncytial Virus
Virginia Polytechnic Institute and State University
Hometown: Bethesda, MD
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203 • Govind Rangrass
A Novel Northern Blotting Method to Detect Small RNAs
Yale University
Hometown: Kalamazoo, MI
Dr. Zonglin Hu,
Dr. Stephen Leppla, Preceptors
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204 • Yuanyuan Ren
Are There Any Links between Diabetes and NFkB?
Richard Montgomery High School
Hometown: North Potomac, MD
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Ms. Hongshan Wang, Preceptors
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205 • Mark R. Ryherd
Abnormalities of CD4+ and CD8+ Central Memory Cells with Chronic Graft-versus-host Disease Show Normalization following Extracorporeal Photopheresis
University of Iowa
Hometown: Webster City, IA
Dr. Harry L. Malech, Preceptor
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206 • Maher Salahi

Application of Expression Microdissection (xMD) to the Analysis and Progressive Understanding of Systemic Lupus Erythematosus (SLE)
Duke University
Hometown: Washington, DC
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Dr. Barbara A. Newman, Preceptors
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207 • Eva S. Seligman

Functional Analysis of Mouse N-Formyl-peptide Receptor Gene Cluster
University of Southern California
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Dr. Philip Murphy, Preceptors
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208 • Adam R. Shoffner

Sero Prevalence of a Novel Gram Negative Rod in Patients with Chronic Granulomatous Disease
University of Kansas
Hometown: Lawrence, KS
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209 • Melanie S. Spoor

Inhibition of Naïve T Cell Th1/Th2 Differentiation by CD4+CD25+ Regulatory T Cells in vitro
Colorado State University
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Hometown: Grand Forks, ND
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Laboratory of Immunology

210 • Joanna K. Timmer

Characterization of the Expression and Function of the Regulatory T-Cell (Treg)-associated Transcription Factor, FoxP3, during Normal CD4+ T-Cell Activation
Stone Ridge High School
Hometown: Silver Spring, MD
Dr. Audrey Kinter,
Ms. Melanie Sion, Preceptors
Laboratory of Immunoregulation

211 • Mary Jue Xu

Producing Jurkat Cell Lines Expressing Pertussis Toxin-resistant G-Proteins for Studying Chemokine Receptor Signaling
Unionville High School
Hometown: West Chester, PA
Dr. Joshua M. Farber,
Dr. John F. Foley, Preceptors
Laboratory of Molecular Immunology

212 • Mikael Yisrael

Investigations of TCR-mediated Signaling
Peddie School
Hometown: New York, NY
Dr. Sharon H. Jackson, Preceptor
Laboratory of Host Defenses

213 • Yuan (Chelsea) Zhang

Regulation of the Leukocyte Chemoattractant Fractalkine by Oxidized LDLs in Coronary Artery Smooth Muscle Cells
Montgomery Blair High School
Hometown: Derwood, MD
Dr. Philip M. Murphy,
Dr. Jana Barlic, Preceptors
Laboratory of Molecular Immunology

214 • Victor Zhu, Kasima Brown

Maturation of Midgut Plasmodium gallinaceum in Aedes aegypti Mosquitoes
Thomas Jefferson High School for Science and Technology
Northfield Mount Hermon School
Hometown: Arlington, VA
Colonial Heights, VA
Dr. Thomas F. McCutchan,
Ms. Margery Sullivan, Preceptors
Laboratory of Malaria and Vector Research

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

215 • Luciann Bracero

Gene Expression Profiling of Ig-secreting Plasma Cells from Tonsil and the Periphery of SLE Patients
University of Puerto Rico
Hometown: Silver Spring, MD
Dr. Amrie Grammer, Preceptor
Autoimmunity Branch

216 • Ea Chen (Ian) Chiang

Comparative Analysis of Catabolic Gene Promoters in Osteoarthritis following Pro-inflammatory Cytokine Challenge
Cornell University
Hometown: Flushing, NY
Dr. Rocky S.Tuan,
Dr. Benjamin A. Byers, Preceptors
Cartilage Biology and Orthopaedics Branch

217 • Jimmy H. Daruwalla

Repertoire and Mutation Analysis of the CD19+, IgM+, IgD+, CD27-, CD21+ and CD23- B Cell Subset in the Normal Human Spleen and Peripheral Blood of Patients with Systemic Lupus Erythematosus
McGill University
Hometown: Rockville, MD
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Dr. Peter E. Lipsky, Preceptors
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218 • Michelle C. Eckman

Variation of Wnt Gene Expression in Normal and Osteoarthritic Chondrocytes using a High-density Pellet Model
Meade Senior High School
Hometown: Severn, MD
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219 • Kimberly A. Everett

The Implication of the Glucocorticoid Receptor Alpha in Chondrogenic Differentiation of Adult Human Mesenchymal Stem Cells
Thomas Jefferson High School for Science and Technology
Hometown: Arlington, VA
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220 • Nolan A. Fox

The Effect of Small Molecules on the Osteogenic Differentiation of C3H10T1/2 Mesenchymal Stem Cells
University of Florida
Hometown: Clearwater, FL
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221 • Heather D. Hardway

Finding the Symmetry of an Image using Common Lines
Rice University
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Laboratory of Structural Biology Research

222 • Alex S. Jones

Energy Minimization of T4 DNA using Monte Carlo Methods
Virginia Polytechnic Institute and State University
Hometown: Springfield, VA
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Dr. Mario Cerritelli, Preceptors
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223 • Mark Krakauer

Mechanical Force-induced Paracrine Modulation of MSC's Chondrogenic Differentiation
Mt. Sinai School of Medicine
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224 • Annie M. Le

The Role of the Cytoskeleton in Chondrogenesis
University of Rochester
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225 • Rami Maarouf

Cellular Mechanisms Regulating Muscle Atrophy
Fairfax High School
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Laboratory of Muscle Biology

226 • Brittney A. Manilla

Studying the Interactions between the Capsid and Surface Glycoproteins of Hepatitis B Virus
University of Maryland

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227 • Carolina M. Montano

Effect of DNA Damage on Transcription
Brigham Young University
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228 • Jeffrey M. Mufson
IL-17 and IL-6 Changes in Major Depressive Disorder and Associated Biological Correlates
Brandeis University
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229 • Vina H. Nguyen
Optimization of Protein Expression in Human Stem Cells using a Lentiviral System
Academy of the Holy Cross
Hometown: Bethesda, MD
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Dr. Lin Song, Preceptors
Cartilage Biology and Orthopaedics Branch

230 • Ryan W. Novince
Effects of IL-21 on Human B Cell Homeostasis
Case Western Reserve University
Hometown: Cincinnati, OH
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Autoimmunity Branch

231 • Lance D. Robert
Immunofluorescent Localization of Muscle Proteins in Primary Mouse Myotube Cultures
Brigham Young University
Hometown: Orem, UT
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232 • John Y. Shin
Designing a Graphical User Interface for a 3D Visualizing and Modeling Tool for 3D Electron Microscopy
University of Maryland
Hometown: Silver Spring, MD
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Laboratory of Structural Biology Research

233 • Jaskaran Singh
X-Ray Crystallography
Richard Montgomery High School
Hometown: Rockville, MD
Dr. Bijan Ahvazi, Preceptor
X-Ray Crystallography Facility

234 • Michael Stockman
Resolution-driven Adaptive Filtering of Tomogram in Electron Microscopy
Case Western Reserve University
Hometown: Germantown, MD
Dr. Giovanni Cardone, Preceptor
Laboratory of Structural Biology Research

235 • Ekta Taneja
Examining Type I Collagen Quantity, Structure, and Function in the Bone Matrix of Osteogenesis Imperfecta Tissue via Atomic Force Microscopy
Montgomery Blair High School
Hometown: Burtonsville, MD
Dr. Joy Blair,
Ms. Ekta Taneja, Preceptors
Autoimmunity Branch

236 • Aonor M. Wesley
Preparation and Characterization of Retroviral DLX3- pHex Construct for Transduction into E6/E7 Keratinocytes
Bishop McDevitt High School
Hometown: Philadelphia, PA
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Ms. Yesenia Rivera, Preceptors
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237 • James Wylie
Imaging of Subchondral Bone using Micro-CT in Non-human Primate Knees
University of New Hampshire
Hometown: Boxborough, MA
Dr. Joy Blair, Preceptor
Autoimmunity Branch

238 • Raphael Yao
Human Umbilical Cord Perivascular Cells as a Candidate Source of Mesenchymal Stem Cells
Northwestern University
Hometown: Rockville, MD
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Cartilage Biology and Orthopaedics Branch

National Institute of Child Health and Human Development (NICHD)

239 • Jennifer S. Allen Brooks

Cognitive Development in Juvenile Rhesus Macaques
Whitman College
Hometown: Oakland, CA
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240 • Angel M. Barber;

Felicia Washington
Diabetes Problem-solving in Adolescents
Howard University
Drexel University
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Washington, DC
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241 • Kyle Basques

Telomeres and Hypercortisolism
Harvard University
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Medicine Branch

242 • Michelle M. Carlton

Tapping into Scents
Ohio State University
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Synaptic Neurophysiology

243 • Michael M. Chau

Effects of Bone Morphogenetic Protein-2 on Growth Plate Chondrogenesis: An Organ Culture Study
Northwestern University
Hometown: Beaverton, OR
Dr. Jeffrey Barron,
Dr. Ola Nilsson, Preceptors
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244 • Everis H. Clarke, Jr:

A Genetic Mosaic Screen for Identifying Eye-brain Connectivity Mutants
Walter Johnson High School
Hometown: Bethesda, MD
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and Development

245 • Elizabeth S. Dahlquist

Power and Sample Size Calculation of a Case-control Study of Biomarkers with Detection Limits
University of South Florida
Hometown: St. Petersburg, FL
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246 • Rohit K. Dewan

Transcriptional Activity and Subcellular Trafficking of the Human Glucocorticoid Receptor
Montgomery Blair High School
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Medicine Branch

247 • Lesley A. Everett

HOT DNA R-Loops and Recombination
University of Washington
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248 • Nicholas L. Evoy

Examination of the Role of Tyrosine Phosphorylation in Regulating Ldb Mediated Transcription
Walt Whitman High School
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249 • Benjamin C. Falk

Developing a Method to Identify the Function of Neuron Subtypes Transmitting Spectral Information
Charles E. Smith Jewish Day School
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and Development

250 • Teresa Fu

Endometrial Protein Expression in Endometriosis
Rice University
Hometown: Coppell, TX
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251 • Heraa S. Haj-Elsafi

Regulation of the HPA Axis by Progesterone
Johns Hopkins University
Hometown: Greenbelt, MD
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252 • Kelley Harris

Cationic Peptides Assemble Liquid-crystalline Lipid Complexes
C.K. McClatchy High School
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Dr. Daniel Harries, Preceptors
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Structural Biology

253 • Shiwei He

Genotyping and Phenotypic Analysis of Gene-altered Mice with Developmental Defects
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and Development

254 • Janice J. He
Photosensitizers as Mitotic Poisons
Groton School
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Medical Biophysics

255 • Khalisa N. Herman
*Social Play and Exuberance in
Juvenile Rhesus Macaques*
University of Maryland
Hometown: Germantown, MD
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Laboratory of Comparative Ethology

256 • Jonathon R. Howlett
*Size and Social Behavior in
Rhesus Macaques*
Stanford University
Hometown: Bloomfield Hills, MI
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Laboratory of Comparative Ethology

257 • June Hu
*The Proportions of Mature and
Pro- BDNF in Different Brain Regions*
Montgomery Blair High School
Hometown: Rockville, MD
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Synaptic Neurophysiology

258 • Rwo-Wen Huang
*FRET Based Raichu-Rap, Ras Imaging
in Xenopus Spinal Neuron*
Johns Hopkins University
Hometown: Midlothian, VA
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Synaptic Neurophysiology

259 • Nader Jameel
*Using P Element Transposons
to Delete SNF2 Family Genes
in Drosophila*
Ohio State University
Hometown: Reynoldsburg, OH
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260 • Anandhi P. Jeyabalan
*Circulating Angiogenic Factors,
Endothelial Health, and Risk
of Preeclampsia*
University of Michigan
Hometown: Ann Arbor, MI
Dr. Richard J. Levine, Preceptor
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and Prevention Research

261 • Nancy Kim
*Cyclin-dependent Kinase 5
Suppresses the Transcriptional
Activity of the Glucocorticoid
Receptor by Phosphorylation
of the Latter's Serine Residues*
George Washington University
Hometown: North Potomac, MD
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262 • Sarah K. Kozar
*Chromatin Remodeling in an
in vitro Differentiation System*
University of Newcastle upon
Tyne, England
Hometown: Mclean, VA
Dr. Bruce Howard,
Dr. Analia Porras, Preceptors
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Growth Regulation

263 • Carl Kunda
*Pol II Promoters are the Target
Sites for the Integration of Tfl,
a Retrotransposon of
Schizosaccharomyces pombe*
Rutgers College
Hometown: Barnegat, NJ
Dr. Henry Levin, Preceptor
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and Development

264 • Eben I. Lichtman
*Analysis of Gene Expression in
Long-term Potentiation*
Oberlin College
Hometown: Newton, MA
Dr. R. Douglas Fields, Preceptor
Section on Nervous System
Development and Plasticity

265 • Alexander S. Lo
*Comparison of Vasopressin 1a and
Vasopressin 1b Receptor-mediated
Release of Intracellular Calcium*
Johns Hopkins University
Hometown: Potomac, MD
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Dr. Sharla Young, Preceptors
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266 • Kathryn N. Maher
*Screening for Intronenic Suppressors
of the Switch 2 Mutation In Yeast
Translation Initiation Factor eIF5B*
Pennsylvania State University
Hometown: Massapequa, NY
Dr. Byung-Sik Shin,
Dr. Thomas Dever, Preceptors
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267 • Saiyid S. Mahmood
The Formation of Giant Unilamellar Vesicles by Electro-swelling Method
University of Illinois
Hometown: Detroit, MI
Dr. Tatiana Rostovtseva, Preceptor
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268 • Siti N. Morris
Activating Protein Complex-I Pathway Is Downregulated in Uterine Leiomyoma
Brown University
Hometown: Providence, RI
Dr. William H. Catherino, Preceptor
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269 • Sunni L. Mumford
Pooling Biospecimens and Limits of Detection: Effects on ROC Curve Analysis
Harvard School of Public Health
Hometown: West Jordan, UT
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270 • Pingting Nie
Drosophila ovs Mutation Disrupts Visual System Connectivity
Thomas S. Wootton High School
Hometown: North Potomac, MD
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Dr. Lei Xu, Preceptors
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271 • Philip G. Parham
Potential Role of Endocytosis and Recycling of Delta in Activating the Notch Receptor
DeMatha Catholic High School
Hometown: Mitchellville, MD
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Dr. Moloy Guswami, Preceptors
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272 • Jeremy Rassen
Women Who are Trying to Conceive: Does Intention to Change Health Behavior Predict Actual Change?
Harvard School of Public Health
Hometown: Boston, MA
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273 • Shelley Sahu
Tetracycline-dependent Inducible Expression of Tissue Inhibitor of Matrix Metalloproteinase 2 in Transgenic Xenopus laevis
Northwestern University
Hometown: Glendale, MD
Dr. Yun-Bo Shi,
Dr. Liezhen Fu, Preceptors
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274 • Lindsay R. Saunders
*Characterization of Genes Important to Mesodermal Induction of Xenopus laevis Embryos using *in situ* Hybridization*
Simpson College
Hometown: Poplar Grove, IL
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275 • Ali N. Shabestari
Non-invasive Multimodality Imaging for Monitoring Kaposi's Sarcoma Treatment
University of Maryland
Hometown: Bethesda, MD
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276 • Tania A. Singh
Exploration of eIF2-beta Binding Sites on eIF2-gamma Subunit
University of Maryland, Baltimore County
Hometown: Gaithersburg, MD
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277 • Prabha Singh
Mapping Age-related Chromatin Remodeling in Human Skin Fibroblasts by ChIP-HPLC
University of Maryland
Hometown: Silver Spring, MD
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Dr. Valya Russanova, Preceptors
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278 • Natalie M. Sorbello
The Effect of HSP90 Inhibitor 17-DMAG on Cell Proliferation in MPC Cells
College of the Holy Cross
Hometown: Potomac, MD
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Reproductive Biology and Medicine Branch

279 • Mary Beth Sutter
ER Stress in Osteogenesis Imperfecta
University of Maryland
Hometown: Sparks, MD
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Dr. Joan C. Marini, Preceptors
Bone and Extracellular Matrix Branch

280 • Kira C.Taylor

The Effect of Preconceptional Exposure to Polychlorinated Biphenyls on Secondary Sex Ratio
Emory University
Hometown: Spartanburg, SC
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281 • Nicholas M.Tompkins

Effects of Removal of Activity-dependent Expression of BDNF through Promoter 3 in Knockout Mice on their Behavior, Learning, and Memory
Colorado State University
Hometown: Grand Junction, CO
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Dr. Kazuko Sakata, Preceptors
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282 • Sefanit A. Urgessa

Genetic Mapping of Two Loci Involved in R7/R8 Connectivity in Drosophila Visual System
Albert Einstein High School
Hometown: Silver Spring, MD
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283 • Shaleen N.Vira

Surface Expression of Influenza Hemagglutinin
New York University
Hometown: Silver Spring, MD
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284 • David A.Wang

Phosphorylation and O-Glycosylation Sites Identification in Peptides by Ba(OH)2 Catalyzed B-Elimination/Propanethiol Addition and Mass Spectrometric Analyses
William Mason High School
Hometown: Mason, OH
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285 • Nancy Wang

Self-biting Behavior in Rhesus Monkeys (Macaca mulatta)
Stanford University
Hometown: Silver Spring, MD
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286 • Lisa M.Watanabe

Small Non-coding RNA Regulators in E. coli
University of Wisconsin
Hometown: Las Vegas, NV
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287 • Nicole J.Wolf

Maternal Depression: Preliminary Findings from Self-report of Parenting Characteristics, Child Behavior and Family Environment
University of Tennessee
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288 • Richard L. Zhang

Searching for Metastatic Regulators or Suppressors in Mouse Pheochromocytoma Models
Mission San Jose High School
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289 • Xiaoqi Zhu

Optimization of Spike-sorting Algorithms
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290 • Kiran Belani

Effect of a Laminin Alpha-1 Peptide, AG73, on Breast Cancer Cell Metastasis
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291 • Elaine N. Chow

Kallmann Syndrome Anosmin-1 Gene is Expressed in Cranial Neural Crest
University of California, San Francisco
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292 • Constance H. Jin

Making an Adenovirus Expression Vector for Human Dentin Sialophosphoprotein
University of Maryland
Hometown: Potomac, MD
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293 • Benjamin R. Kaplan-Singer

Characterization of the Receptor and Metastatic Properties of a Laminin alpha-1 Chain Peptide on Breast Carcinoma Cells
University of North Carolina
Hometown: Rockville, MD
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294 • Utsha Khatri

Mitochondrial versus Secretory TGF-beta: Mutational Analysis of Protein Sorting Signals
Springbrook High School
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295 • Elizabeth M. Leddy

The Role of PTEN in Mast Cell Signaling
Baylor College of Dentistry
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296 • Frederick Liu

Cell Signaling amongst Oral Bacteria
Columbia University
Hometown: Clarence Center, NY
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297 • Elana K. Lowell

Differential Gene Expression following Tissue Injury and NSAID Administration
Cornell University
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298 • Cynthia R. Peng

The Effects of Homocysteine on MMP-1 and MMP-9
Thomas S. Wootton High School
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299 • Jennifer M. Romanek

Developing a Recombinant Adeno-associated Virus Encoding Manganese Superoxide Dismutase
Maret School
Hometown: Washington, DC
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Dr. Ana Cotrim, Preceptors
Gene Therapy and Therapeutics Branch

300 • Anne J. Yoon

Multiplex PCR Array to Characterize Stem Cells from Tendon
University of California, Los Angeles, School of Dentistry
Hometown: Pleasant Hill, CA
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National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

301 • Tori O. Begay

Validation of Physical Activity Monitors in American Indians
Fort Lewis College
Hometown: Phoenix, AZ
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302 • Amanda B. Bell

Communicating the Results of Renal Screening Tests using the KDOQI Chronic Kidney Disease Stages
Northeastern State University
Hometown: Tahlequah, OK
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Dr. Jennifer Weil, Preceptors
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303 • David Chee

Pathway Analysis of Gene Expression during Hematopoietic Stem/Progenitor Cells' Development into Lineages
Rice University
Hometown: Houston, TX
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304 • Billy M. Clifford-Nunn

Analysis of the Human Plasma Proteome by Gel and Free Flow Electrophoresis and Mass Spectrometry
University of Michigan
Hometown: Burton, MI
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305 • Lauren Costello

Microfocusing Spectrometer: Modifications to Characterize Crystallized Photosensitive Proteins
University of Pennsylvania
Hometown: Marlton, NJ
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306 • Meredith M. Coyle

Putative Role of Orexin in Body Weight Regulation, Patients with Narcolepsy
Emory University
Hometown: Washington, DC
Dr. Giovanni Cizza, Preceptor
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307 • Cynthia K. Crosswhite

New Tools for the Study of the Central Nervous System and Drug Abuse
Wellesley College
Hometown: Beltsville, MD
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308 • La France Daniels, Jr.

Functional Roles of Nicotinic Receptors: Behavioral Effects of Agonists, Antagonists and Positive Modulators in Mice
California State University, Northridge
Hometown: Los Angeles, CA
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309 • Brenda Davis

Body Mass Index is a Superior Marker of Obesity in Women than Men
Bethune-Cookman College
Hometown: Daytona Beach, FL
Dr. Anne Sumner, Preceptor
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310 • Lesley-Ann Giddings

Synthesis of Trimeric gp41 Analogs
Smith College
Hometown: Brooklyn, NY
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Dr. Son Lam, Preceptors
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311 • Adam J. Gomez

Physical Interactions between Amyloid-affecting St11 Mutations and Hsp70/Hsp90 Chaperones
University of Houston
Hometown: Houston, TX
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312 • Jesus Hernandez-Burgos

Role of Pro-inflammatory and Anti-inflammatory Cytokines in the Bone Mineral Density Observed in Women with Major Depression
University of Puerto Rico
Hometown: Juana Diaz, PR
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313 • Jessica A. Hui

Strategies to Improve Protein Sequence Coverage from In-gel Digests
Harvard University
Hometown: Honolulu, HI
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Ms. Jenny Ho, Preceptors
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314 • Ethan G. Joseph

The Effects of Nitrite on the Concentration of MetHb in Human Blood
Bethesda-Chevy Chase High school
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Ms. Chiara D'agostino, Preceptors
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315 • Joshua McHugh
Proteomics on Proteins Associated with Lipid Droplets
Haverford College
Hometown: Brooklyn, NY
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Ms. Bindu Abraham, Preceptors
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316 • Matthew D. Moravec
Synthetic Studies of Inhibitors of Rv170 and Rv1082 from Mycobacterium tuberculosis
Biola University
Hometown: Salem, OR
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Dr. Belhu B. Metaferia, Preceptors
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317 • Heather M. Murphy
The Use of Lentivirus to Over-express EpoR in Human Erythroid Progenitor Cells
University of Arkansas
Hometown: Alexandria, VA
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318 • Wazo Z. Myint
Crystallization Studies of Mature Glyoxysomal Malate Dehydrogenase Mutants D157N and H184N
University of Richmond
Hometown: Elkins Park, PA
Dr. David R. Davies, Preceptor
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319 • Srikanth Rao
Structure-activity Relationships of 4'-thioadenosine Derivatives at A1, A2A, and A3 Adenosine Receptors
Washington University, St. Louis
Hometown: Valley Park, MO
Dr. Kenneth A. Jacobson, Preceptor
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320 • Yasmin Salehizadeh
A Novel Technique for High Fidelity Long Polymerase Chain Reaction Amplification of the Most Common Hepatitis C Virus Genotypes
Holton-Arms School
Hometown: Potomac, MD
Dr. Theo Heller, Preceptor
Liver Diseases Branch

321 • Benjamin S. Scruggs
Proteomic Biomarker Discovery for Sepsis-induced Acute Renal Failure
Vanderbilt University
Hometown: Shreveport, LA
Dr. Robert A. Star, Preceptor
Metabolic Diseases Branch

322 • Benjamin J. Shin
The Effect of Ascorbic Acid on Nitric Oxide Production in Human Red Blood Cells
Cornell University
Hometown: Oak Hill, VA
Dr. Alan N. Schechter,
Dr. Nathawut Sibmooh, Preceptors
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323 • Alexandra Y. Shin
Exploring a Possible Role of the Transcription Factor, Stat5, in the Mouse Brain
University of Virginia
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Dr. Lothar Hennighausen,
Dr. Ji-Yeon Lee, Preceptors
Laboratory of Genetics and Physiology

324 • Elise M. Siegel
Autoimmune Disease: 6-acetamido-1-acetyl-1-indazole: A Potential Drug Treatment
University of North Carolina
Hometown: Ellicott City, MD
Dr. Agnieszka Sulima, Preceptor
Laboratory of Medicinal Chemistry

325 • Stephanie H. Sockbeson
Cross-section and Longitudinal Studies
University of Maine
Hometown: Derry, NH
Dr. Joy Bunt, Preceptor
Phoenix Epidemiology and Clinical Research Branch

326 • Aaron F. Summers
Functional Characterization of -499 A/G Type 2 Deiodinase Gene Polymorphism
Tufts University School of Medicine
Hometown: Boston, MA
Dr. Francesco S. Celi, Preceptor
Clinical Endocrinology Branch

327 • James R. Swetnam
Identification of Helicobacter pylori in-vivo Expressed Promoters Using IVET Technology
College of William and Mary
Hometown: Oak Hill, VA
Dr. William G. Coleman, Preceptor
Laboratory of Biochemistry and Genetics

328 • Jill L. Taylor
Characterization of Embryonic Satellite Cells Overexpressing EpoR
Fairmont State University
Hometown: Volga, WV
Dr. Connie T. Noguchi,
Dr. Renaud Warin, Preceptors
Laboratory of Molecular and Cellular Biology

329 • Justin Taylor
Does Single-stranded Nucleic Acid-binding Protein, Pur-alpha, Have Any Relation to Fragile X Syndrome?
University of New Mexico
Hometown: San Antonio, NM
Dr. Karen Usdin, Preceptor
Laboratory of Molecular and Cellular Biology

330 • Anita M. Valles

Analysis of SIM1 as an Obesity Candidate Gene in Pima Indians
Glendale Community College
Hometown: Avondale, AZ
Dr. Leslie Baier,
Ms. Janel L. Baer, Preceptors
Phoenix Epidemiology and Clinical Research Branch

331 • Sanese K. White

Erythropoietin Receptor (EPO-R) Expression in Embryonic, Neonatal, and Adult Mouse Cardiomyocytes
Delaware State University
Hometown: Dover, DE
Dr. Ruifeng Teng,
Dr. Connie Noguchi, Preceptors
Laboratory of Molecular and Cellular Biology

332 • Sloane S. Yu

Modulation of Stat3/5 Signaling in Mammary Tissue by SOCS3
Cornell University
Hometown: Potomac, MD
Dr. Margit Pacher-Zavisin,
Dr. Lothar Hennighausen, Preceptors
Laboratory of Genetics and Physiology

333 • Yousef Zarbalian

Vitamin C Recycling: Role of Glucose Transporters 1-12 in Dehydroascorbic Acid Transport
Louisiana State University
Hometown: Baton Rouge, LA
Dr. Mark Levine, Preceptor
Digestive Diseases Branch

334 • Yin Zheng

The Inhibition Functions of Resveratrol on the Proliferation of BRCA 1 Mutation Related Malignant Cell Lines
Washington University, St. Louis
Hometown: North Potomac, MD
Dr. Chuxai Deng,
Dr. Rui-Hong Wang, Preceptors
Genetics of Development and Diseases Branch

National Institute of Environmental Health Sciences (NIEHS)

335 • Melvina S. Evereklian

Periungual Capillary Findings in

Juvenile Dermatomyositis

Montgomery College

Hometown: Germantown, MD

Dr. Lisa Rider;

Dr. Gulhara Mamyrova, Preceptors

Office of Clinical Research,

Environmental Autoimmunity Group

336 • Jason B. Monroe

Validation of the Myositis Damage

Index for Juvenile and Adult Idiopathic

Inflammatory Myopathies

University of California, Los Angeles

Hometown: Placentia, CA

Dr. Lisa Rider; Preceptor

Office of Clinical Research,

Environmental Autoimmunity Group

337 • Laura C. Sillers

Cytokine Gene Polymorphisms as

Susceptibility Factors for Juvenile

Idiopathic Inflammatory Myopathies

Princeton University

Hometown: Potomac, MD

Dr. Terry O'Hanlon,

Dr. Lisa Rider; Preceptors

Office of Clinical Research,

Environmental Autoimmunity Group

National Institute of Mental Health (NIMH)

338 • Sruthi R. Arepalli

Glucocerebrosidase Mutations in Subjects with Parkinsonism
Richard Montgomery High School
Hometown: Bethesda, MD
Dr. Ellen Sidransky,
Mr. Michael Eblan, Preceptors
Clinical Neuroscience Branch

339 • Michael J. Berlin

An Investigation of the Relationship between Age, Ethnicity, Gender, and Anhedonia in a Sample of Unipolar Depressed and Bipolar Patients
Ithaca College
Hometown: Chevy Chase, MD
Mr. Alex Noury, Preceptor
Mood and Anxiety Disorder Research Program

340 • Arter L. Biggs

Fear and Anxiety: Different Underlying Mechanisms
Grambling State University
Hometown: Fairfield, AL
Dr. Christian Grillon, Preceptor
Mood and Anxiety Disorder Research Program

341 • Anna B. Binstock

A Behavioral Analysis of Children At-risk for Bipolar Disorder
Cornell University
Hometown: Chevy Chase, MD
Dr. Melissa A. Brotman, Preceptor
Pediatric and Developmental Neuropsychiatry Branch

342 • Diondra T. Burney

Knock-down of Chromogranin A protein in PC12 Cells
Suncoast High School
Hometown: West Palm Beach, FL
Dr. Lee Eiden,
Dr. Tomris Mustafa, Preceptors
Laboratory of Cellular and Molecular Regulation

343 • Dana L. Charles

The Long-term Outcome of Sydenham's Chorea
Dartmouth College
Hometown: Lebanon, PA
Dr. Paul J. Grant, Preceptor
Pediatric and Developmental Neuropsychiatry Branch

344 • Christopher R. Cheatham

The Effects of Psychiatric Diagnosis and Medication on Attention
Caesar Rodney High School
Hometown: Camden, DE
Dr. Joseph Snow, Preceptor
Mood and Anxiety Disorder Research Program

345 • James X. Chen

PKC Regulates NMDA Receptor Phosphorylation in a Subunit Specific Manner: The Relevance to the Treatment of Mood Disorders
University of Connecticut
Hometown: Boyds, MD
Dr. Jing Du,
Dr. Husseini Manji, Preceptors
Laboratory of Molecular Pathophysiology

346 • Genevieve C. Cody

Familial Associations between Migraine and Sleep
Duke University
Hometown: Mclean, VA
Dr. Kathleen R. Merikangas, Preceptor
Mood and Anxiety Disorder Research Program

347 • Melissa E. Crowder

Sex Differences in Perceived Stress in African Americans
Walter Johnson High School
Hometown: Bethesda, MD
Dr. Kathleen R. Merikangas, Preceptor
Mood and Anxiety Disorder Research Program

348 • Ramsey Daher

The Role of Yohimbine as an Alpha-2 Adrenergic in Mental Health
University of Virginia
Hometown: Arlington, VA
Dr. Paul Carlson, Preceptor
Mood and Anxiety Disorder Research Program

349 • Monique Dalton,

Tracking Nuclear Hormone Receptor Expression in a Recombinant System
Xavier University of Louisiana
University of Wisconsin
Hometown: Rockville, MD
Rockville, MD
Dr. Alexandra L. Tait,
Dr. Esther M. Sternberg, Preceptors
Section on Neuroendocrine Immunology and Behavior

350 • Aileen M. Echiverri

Psychophysiological Correlates of Attentional Blink
University of Washington
Hometown: Alexandria, VA
Dr. Brian Cornwell,
Dr. Christian Grillon, Preceptors
Mood and Anxiety Disorder Research Program

351 • Dina Eliezer

Work-related Migration and Mental Illness Among Three Ethnic Groups in Rural Mali
University of Virginia
Hometown: Rockville, MD
Dr. Leslie Caplan,
Dr. Carmi Schooler, Preceptors
Section on Socioenvironmental Studies

352 • Vanessa J. Flores
Study of Cerebral Mechanisms for Auditory Recognition Memory in the Rhesus Monkey
Rutgers University
Hometown: Elizabeth, NJ
Dr. Richard Saunders,
Dr. Mortimer Mishkin, Preceptors
Laboratory of Neuropsychology

353 • David M. Fox
Effects of Low- and High-dose Hydrocortisone Infusion on Amygdala Hemodynamic Response while Viewing Emotional Faces
Charles E. Smith Jewish Day School
Hometown: Potomac, MD
Dr. Wayne C. Drevets,
Dr. Kristine Erickson, Preceptors
Mood and Anxiety Disorder Research Program

354 • Lisa M. Fucito
Cognitive and Familial Risk Factors for Alcohol Use and Problem Drinking in Adolescents
American University
Hometown: Washington, DC
Dr. Kathleen R. Merikangas, Preceptor
Mood and Anxiety Disorder Research Program

355 • Michael Gaskins
Recruitment Outcomes in Mood Disorders Patients
Takoma Academy
Hometown: Bethesda, MD
Dr. Carlos Zarate,
Ms. Libby Jolkovsky, Preceptors
Mood and Anxiety Disorder Research Program

356 • Mercede E. Gorham
The Nutritional Aspect of Schizophrenia
North Carolina Agricultural and Technical State University
Hometown: Upper Marlboro, MD
Ms. Ellen Polignano,
Ms. Sybil Barnaby, Preceptors
Clinical Brain Disorders Branch

357 • Sarah Groner
Phases of Schizophrenia: Prodromal and Active
Melvin J. Berman Hebrew Academy
Hometown: Silver Spring, MD
Ms. Margo Genderson,
Dr. Catherine Diaz-Asper, Preceptors
Clinical Brain Disorders Branch

358 • Lauren A. Hackney
Identification and Characterization of pA134, A Novel Squid Axonal mRNA, and Its Cognate Protein in the Mammalian Brain
Yale University
Hometown: Washington, DC
Dr. Barry B. Kaplan,
Dr. Marie G. Mameza, Preceptors
Laboratory of Molecular Biology

359 • Christopher W. Harris,
Casey Ellis
Progesterone Inhibits TH I -Promoting Responses by Rat Dendritic Cells
East Carolina University
Gaithersburg High School
Hometown: Rockville, MD
Rockville, MD
Dr. Cherie L. Butts,
Dr. Esther M. Sternberg, Preceptors
Section on Neuroendocrine Immunology and Behavior

360 • Carey A. Heller
The Study of Emotion and Memory in Different Populations of Adolescents and Adults
Muhlenberg College
Hometown: Chevy Chase, MD
Dr. Daniel Pine,
Dr. Eric Nelson, Preceptors
Mood and Anxiety Disorder Research Program

361 • Tina Ho
Establishment of a Mammalian Cell Culture System for the Study of Local Protein Synthesis in Neurons
College of William and Mary
Hometown: Springfield, VA
Dr. Barry Kaplan,
Dr. Mi Hillefors, Preceptors
Laboratory of Molecular Biology

362 • Osarimabo I. Imoisili
Inducible Expression of Brain-derived Neurotrophic Factor in Tissue Cultures
Centennial High School
Hometown: Ellicott City, MD
Dr. Jingshan Chen, Preceptor
Clinical Brain Disorders Branch

363 • Eugene Kang
Characterization of a Novel Scorpion Venom Component
College of William and Mary
Hometown: Potomac, MD
Dr. Brian Martin,
Dr. Ramy Moharram, Preceptors
Laboratory of Neurotoxicology

364 • Alison B. Kidwell
Evaluation of Associative Memory Recall using a One-trial Learning Paradigm
Bethesda-Chevy Chase High School
Hometown: Bethesda, MD
Dr. Kazutoshi Nakazawa,
Ms. Catherine J. Cravens, Preceptors
Unit on Genetics of Cognition and Behavior

365 • Elizabeth J. Le
Epitope Tagging of Koala Retrovirus Envelope Protein
University of Maryland,
Baltimore County
Hometown: Silver Spring, MD
Dr. Maribeth Eiden, Preceptor
Laboratory of Cellular and
Molecular Regulation

366 • John B. Lednak
The Effect of Mood Stabilizers on Neurogenic Events in the Hippocampus of Adult Mice
Pennsylvania State University
Hometown: Sewickley, PA
Mr. Robert J. Schloesser, Preceptor
Mood and Anxiety Disorder Research Program

367 • Kendra E. Leigh
Identification of Cellular Components Critical for Virus Envelope-mediated Cell Fusion
Montgomery Blair High School
Hometown: Germantown, MD
Dr. Maribeth Eiden, Preceptor
Laboratory of Cellular and Molecular Regulation

368 • Daniel E. Leland
Eliminating Topological Defects in 3D MRI Brain Surfaces of Primates
Morehouse College
Hometown: Washington, DC
Dr. Robert W. Cox,
Dr. Peggy Christidis, Preceptors
Scientific and Statistical Computing Core Facility

369 • Christine J. Liow
Trafficking of Estrogen Receptor alpha (Er) into Mitochondria and Regulation of Mitochondrial Function in Cultured Hippocampal Neurons*
Thomas S. Wootton High School
Hometown: Gaithersburg, MD
Dr. Husseini Manji,
Dr. Jing Du, Preceptors
Laboratory of Molecular Pathophysiology

370 • Darya A. Litvinchuk
ErbB Expression in the Primate Brain
Gaithersburg High School
Hometown: Gaithersburg, MD
Dr. Cynthia S. Weickert, Preceptor
Clinical Brain Disorders Branch

371 • Amanda R. Lurie
Trafficking of Glucocorticoid Receptor (GR) into Mitochondria and Regulation of Mitochondrial Function during Chronic Stress
Charles E. Smith Jewish Day School
Hometown: Potomac, MD
Dr. Husseini Manji,
Dr. Jing Du, Preceptors
Laboratory of Molecular Pathophysiology

372 • Valeria T. Martinez
Neuropsychological Functioning in Unipolar Depressed Patients Treated with either Memantine or Placebo
University of New Mexico
Hometown: Albuquerque, NM
Ms. Yasmilka E. Sarmiento,
Dr. Jaskaran Singh, Preceptors
Mood and Anxiety Disorder Research Program

373 • Brian S. Mathias
PET Imaging of Dopamine D2 Receptors and Extracellular Dopamine with [¹⁸F]fallypride, D-amphetamine, and Alpha-methyl-para-tyrosine in Healthy Subjects
Carnegie Mellon University
Hometown: Ridgefield, CT
Dr. Robert B. Innis,
Dr. Masahiro Fujita, Preceptors
Molecular Imaging Branch

374 • Kimberly M. Murdaugh
Implementing HB-EGF-induced Cell Ablation to Reveal Dentate Gyrus Function
Hammond High School
Hometown: Columbia, MD
Dr. Kazu Nakazawa, Preceptor
Unit on Genetics of Cognition and Behavior

375 • Renee L. Raville
Relationship of Paternal Age and Psychiatric Diagnosis to the Development of Schizophrenia
Wayne State University
Hometown: Troy, MI
Dr. Michael Egan, Preceptor
Clinical Brain Disorders Branch

376 • Jasmine L. Salters
Construction of a Viral Vector for the Rescue of a TIP39 Knockout
Warwick High School
Hometown: Newport News, VA
Dr. Ted Usdin, Preceptor
Laboratory of Cellular and Molecular Regulation

377 • Tarangi D. Sutaria
Laminar Expression Levels of SREB2 mRNA in Schizophrenia
Gaithersburg High School
Hometown: Montgomery Village, MD
Dr. Cynthia S. Weickert, Preceptor
Clinical Brain Disorders Branch

378 • Elizabeth A. Swedo
An Investigation of Memory Decay in Auditory-verbal Short-term Memory
Dartmouth College
Hometown: Mclean, VA
Dr. Karen F. Berman,
Dr. Bradley Buchsbaum, Preceptors
Clinical Brain Disorders Branch

379 • Rachel Tepper
Characteristics of Participants in Mood Disorder Studies
Washington University, St. Louis
Hometown: Rockville, MD
Ms. Jazmin Moral, Preceptor
Mood and Anxiety Disorder Research Program

380 • Jessica I. Tilghman
GFAPtk: A Transgenic Mouse Model to Study Adult Neurogenesis
Judson High School
Hometown: Converse, TX
Mr. Robert J. Schloesser, Preceptor
Laboratory of Molecular Pathophysiology

381 • Kelly A. Townsend
Characterization of Overall Brain Shape in Williams Syndrome using Spherical Harmonics
University of Rochester
Hometown: Severna Park, MD
Dr. Shane Kippenhan,
Dr. Karen F. Berman, Preceptors
Clinical Brain Disorders Branch

382 • Tess L. Veuthey
Designing Experimental Stimulus Sets of Natural Object Images
Massachusetts Institute of Technology
Hometown: Washington, DC
Dr. Nikolaus Kriegeskorte, Preceptor
Laboratory of Brain and Cognition

383 • Latrice D. Vinson
Man vs. Monkey: Practical Lessons in Creating Brain Surfaces
Clark Atlanta University
Hometown: Atlanta, GA
Dr. Robert W. Cox,
Dr. Peggy Christidis, Preceptors
Scientific and Statistical Computing Core Facility

384 • Jyothi Vynatheya
Bone Lead Burden and Poor Attention: Educational and Social Implications
University of Pennsylvania
Hometown: Whippany, NJ
Dr. Allan F. Mirsky, Preceptor
Section on Clinical and Experimental Neuropsychology

385 • Brigham C. Walker
The Clinical Significance of Incidental Findings in Research Brain MRI from Healthy Controls
Princeton University
Hometown: Vancouver, WA
Dr. Sean Marrett,
Dr. Peter A. Bandettini, Preceptors
Laboratory of Brain and Cognition

386 • Leo M. Walton
Methods for Functional Imaging of Non-human Primates
Macalester College
Hometown: Bethesda, MD
Dr. Andrew H. Bell,
Dr. Fadila Hadj-Bouziane, Preceptors
Laboratory of Brain and Cognition

387 • Robert W. Wise
Functioning in Families with a Child with Bipolar Disorder
Sidwell Friends School
Hometown: Washington, DC
Dr. Ellen Leibenluft, Preceptor
Pediatric and Developmental Neuropsychiatry Branch

National Institute of Neurological Disorders and Stroke (NINDS)

388 • AbdulRasheed A. Alabi
Channeling Our Intuition: Deriving Mechanistic Understanding of Kv Channels from Toxin Interactions
Johns Hopkins University
Hometown: Springfield, IL
Dr. Kenton J. Swartz, Preceptor
Molecular Physiology and Biophysics Section

389 • Nicole M. Armstrong
Economic Decision-making in Two-person Reciprocal Trust Games
University of Maryland
Hometown: Severna Park, MD
Dr. Frank Kruger, Preceptor
Cognitive Neuroscience Section

390 • Elizabeth E. Baumel
Real-time Imaging of CNS Stem Cells
Charles E. Smith Jewish Day School
Hometown: Rockville, MD
Dr. Daniel Hoeppner, Preceptor
Laboratory of Molecular Biology

391 • Rachel C. Bell
Construction of a Brain Atlas for the Common Marmoset, Callithrix jacchus
Montgomery Blair High School
Hometown: Kensington, MD
Dr. Afonso C. Silva,
Dr. John Newman, Preceptors
Laboratory of Functional and Molecular Imaging

392 • Jillian M. Brauth
Angiotensin II Receptor Blockade: Effect on Post Stroke Depression and Anxiety
Thomas S. Wootton High School
Hometown: Rockville, MD
Dr. Alison Baird,
Dr. Violet Wright, Preceptors
Stroke Branch

393 • Tracy R. Butler
Neuropsychiatric Symptoms of Focal Hand Dystonia
Wittenberg University
Hometown: Fort Wayne, IN
Dr. Mark Hallett,
Dr. Valerie Voon, Preceptors
Medical Neurology Branch

394 • Zeke M. Campell
Mean Signal Intensity of Cortex as a New Tool for Disclosing Disease Pathology in Patients with Multiple Sclerosis
Mississippi State University
Hometown: Starkville, MS
Dr. Francesca Bagnato, Preceptor
Neuroimmunology Branch

395 • Dana E. Christofferson
Quantification of Immunoprecipitation Efficiency: Application to beta-Adrenergic Receptors
Cornell University
Hometown: Endwell, NY
Dr. Peter H. Fishman, Preceptor
Laboratory of Molecular and Cellular Neurobiology

396 • Matthew J. Crisp
Microtubule Associated Protein (MAP1A) Light Chain (LC2): Potential Link between N-type Calcium Channels and the Cytoskeleton
Washington College
Hometown: Pasadena, MD
Dr. Miriam Leenders, Preceptor
Synaptic Function Unit

397 • Anastasie M. Dunn-Pirio
Evidence for HIV-1 Infection of Neural Progenitor Cells in Archival Pediatric Brain Tissue
George Washington University
Hometown: Vienna, VA
Dr. Lynnae Schwartz,
Dr. Eugene O. Major, Preceptors
Laboratory of Molecular Medicine and Neuroscience

398 • David J. Einstein
Improvement of Motor Performance in Chronic Stroke Patients by Combined Transcranial DC Stimulation and Somatosensory Stimulation
Yale University
Hometown: Silver Spring, MD
Dr. Nam-Jong Paik,
Dr. Leonardo Cohen, Preceptors
Medical Neurology Branch

399 • Stephen J. Furlani
Offline Prediction of Movement Onset and Discretion between Left and Right Hand Movement
University of Rhode Island
Hometown: Gaithersburg, MD
Dr. Mark Hallett,
Dr. Ou Bai, Preceptors
Cognitive Neuroscience Section

400 • Melanie A. Gasper
Establishment of Pure Melanocyte Cell Lines from Mouse Postnatal Skin
Allegheny College
Hometown: Spring Creek, PA
Dr. Heinz Arnheiter, Preceptor
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401 • Davis Glasser
Formation of a Motor Memory by Action Observation in Stroke Patients
University of Rochester
Hometown: Silver Spring, MD
Dr. Pablo Celnik,
Dr. Leonardo Cohen, Preceptors
Medical Neurology Branch

402 • Nahal Golpayegani
Neuroglobin, a Neuron-specific Hemoglobin, Is Present in Glial Brain Tumors
University of Maryland
Hometown: Rockville, MD
Dr. Ryszard Pluta,
Dr. Sven Glasker, Preceptors
Surgical Neurology Branch

403 • Rebecca M. Grochow
JC Virus Expression during Glial or Neuronal Differentiation of Human Brain Progenitor Cells
Boston University School of Medicine
Hometown: Cambridge, MA
Dr. Gene Major,
Dr. Maria Chiara Monaco-Kushner,
Preceptors
Laboratory of Molecular Medicine
and Neuroscience

404 • Theresa C. Hamer
Sensory Symptoms in Parkinson's Disease, Multiple System Atrophy and Restless Legs Syndrome
McDaniel College
Hometown: Egg Harbor Township, NJ
Dr. Fatta Nahab, Preceptor
Medical Neurology Branch

405 • Parvana A. Hartenstein
Effect of Trichostatin A on Survival of Motor Neuron Gene and Protein Expression
University of California, Los Angeles
Hometown: Pacific Palisades, CA
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Dr. Amy Avila, Preceptors
Neurogenetics Branch

406 • Salar Hazany
D1 Dopamine Receptor Modulation via Protein-protein Interaction
University of California, Los Angeles
Hometown: Encino, CA
Dr. David R. Sibley,
Dr. R. Benjamin Free, Preceptors
Molecular Neuropharmacology Section

407 • Randi E. Heller
Modulation of Anticonvulsant Effects of Neurosteroids by Their Putative Antagonists
Northwestern University
Hometown: Paradise Valley, AZ
Dr. Rafal Kaminski, Preceptor
Epilepsy Research Section

408 • Casey J. Holliday
Real-time Prediction of Human Movement Intention using Scalp Electroencephalography
University of Virginia
Hometown: Chesapeake, VA
Dr. Ou Bai, Preceptor
Medical Neurology Branch

409 • Ranliang Hu
Dopaminergic Modulation of ON and OFF System Light Responses in Zebrafish Retina
University of Pennsylvania
Hometown: Elkins Park, PA
Dr. Ralph Nelson, Preceptor
Neural Circuits Unit

410 • Irina C. Ilie
Comparison of Postsynaptic Density Fractions from Cerebral Cortex and Cerebellum
University of Maryland
Hometown: Bethesda, MD
Dr. Tom Reese,
Dr. Ayse Dosemeci, Preceptors
Laboratory of Neurobiology

411 • Kathryn Jarvis
Elucidating the Pathophysiology of Syringomyelia
George Washington University
School of Medicine
Hometown: Washington, DC
Dr. John Heiss, Preceptor
Surgical Neurology Branch

412 • Michelle T. Joy,
Amy L. French
The Role of Ketone Bodies and Metabolites in the Anticonvulsant Efficacy of the Ketogenic Diet
Brown University
Georgetown University
Hometown: Lighthouse Point, FL
Auburn, NY
Dr. Maciej Gasior, Preceptor
Epilepsy Research Section

413 • Stephanie H. Kim
Extramedullary Hematopoiesis in von Hippel Lindau Disease
Massachusetts Institute of Technology
Hometown: Myersville, MD
Dr. Zhengping Zhuang,
Dr. Deric M. Park, Preceptors
Surgical Neurology Branch

414 • Gokul N. Kumar
Magnetic Resonance Angiography in Patients Treated with Tissue Plasminogen Activator following Acute Stroke: Correlations of Recanalization with Reperfusion and Clinical Outcome
University of Illinois
Hometown: Gurnee, IL
Dr. Steven Warach,
Dr. Lawrence Latour, Preceptors
Stroke Branch

415 • Shivani Lamba
Investigating the Differential Expression of 14-3-3 Isoforms in JCV-infected Astrocytes
George C. Marshall High School
Hometown: Falls Church, VA
Dr. Veerasamy Ravichandran,
Dr. Eugene O. Major, Preceptors
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and Neuroscience

416 • David L. Levitt
Lineage Analysis of CNS Stem Cells
University of Maryland
Hometown: Silver Spring, MD
Dr. Daniel Hoepfner, Preceptor
Laboratory of Molecular Biology

417 • Joyce Y. Lin
Social Cognition Abilities in Corticobasal Degeneration Syndrome Patients
University of Pennsylvania
Hometown: Gaithersburg, MD
Dr. Jordan Grafman, Preceptor
Cognitive Neuroscience Section

- 418 • Yang Liu**
Antigen Reactivity of T Lymphocytes Implicated in Demyelination
 Columbia University
 Hometown: Woodbury, MN
 Dr. Jacquie Shukaliak, Preceptor
 Neuroimmunology Branch
- 419 • Sara Maguire**
Schizophrenia's Influence on the Decision to Move versus the Onset of Movement
 Brown University
 Hometown: Bethesda, MD
 Dr. Sarah Pirio Richardson, Preceptor
 Medical Neurology Branch
- 420 • Kristen R. Maynard**
A Comparative Study of HHV6 Genome and mRNA Transcript Regulation in Human Biopsy Brain Materials Associated with Seizure Disorders
 Bowdoin College
 Hometown: Ivoryton, CT
 Dr. Steven Jacobson, Preceptor
 Neuroimmunology Branch
- 421 • Erin M. McClellan**
Mirroring a Movement: A Pilot Study
 Duke University
 Hometown: Westfield, NJ
 Ms. Kris Knutson,
 Dr. Jordan Grafman, Preceptors
 Cognitive Neuroscience Section
- 422 • Darby Miller**
Histone Modifications and Their Role in the Pathogenesis of Polyglutamine Disease
 George Washington University School of Medicine
 Hometown: Rockville, MD
 Dr. Nicholas Di Prospero,
 Dr. Kenneth Fischbeck, Preceptors
 Neurogenetics Branch
- 423 • Haik Mkhikian**
Cell Survival and Differentiation Signaling Pathways in Neural Stem Cells and Neuronal Cultures
 University of California, Irvine
 Hometown: Bethesda, MD
 Dr. Ron McKay, Preceptor
 Laboratory of Molecular Biology
- 424 • Christopher Nabel**
A Novel Cellular Imaging System
 Harvard College
 Hometown: Washington, DC
 Dr. Dan Hoeppner;
 Dr. Ron McKay, Preceptors
 Laboratory of Molecular Biology
- 425 • Mukil Natarajan**
Brain-computer Interface Based Cortical Training for Rehabilitation
 Rice University
 Hometown: Rockville, MD
 Dr. Ou Bai, Preceptor
 Medical Neurology Branch
- 426 • Jill M. Neiman**
Characterization of D2 Dopamine Receptor and Na+/K+ ATPase Protein-protein Interaction
 Muhlenberg College
 Hometown: Fleetwood, PA
 Dr. David R. Sibley,
 Dr. Lisa A. Hazelwood, Preceptors
 Molecular Neuropharmacology Section
- 427 • Christopher R. Nicholas**
Using Transcranial Magnetic Stimulation to Measure Interhemispheric Inhibition in Proximal and Distal Arm Muscle Representations
 University of Tennessee
 Hometown: Seekonk, MA
 Dr. Michelle Harris-Love,
 Dr. Leonardo Cohen, Preceptors
 Medical Neurology Branch
- 428 • Katherine E. O'Leary**
Meaning Relations among Words Describing Human Social and Animal Functions
 Georgetown University
 Hometown: Middletown, NJ
 Dr. Roland Zahn, Preceptor
 Cognitive Neuroscience Section
- 429 • Kartik Pattabiraman**
Identification of Genes Responsible for Glial Cell Differentiation from Neural Progenitor Cells
 Brown University
 Hometown: North Potomac, MD
 Dr. John Park,
 Dr. Dong-Won Kang, Preceptors
 Surgical Neurology Branch
- 430 • Ryan B. Perkins**
The TAFFY Database: Identifying Transcription Factor Binding Sites by Affymetrix ID
 Brigham Young University
 Hometown: Mesquite, NV
 Dr. Yang C. Fann, Preceptor
 Intramural Information Technology Group
- 431 • Farzin Rashti**
Efficacy of Anti-viral Drugs in HHV-6-infected Cells
 Howard University College of Medicine
 Hometown: Silver Spring, MD
 Dr. Steven Jacobson, Preceptor
 Neuroimmunology Branch
- 432 • Catherine L. Reynolds**
A Comparison of Human Brain Activation during Vocalization and Exhalation: An Event-related fMRI Study
 University of Colorado
 Hometown: Boulder, CO
 Dr. Torrey M. Loucks, Preceptor
 Medical Neurology Branch

433 • Alan R. Rodrigues
Behavioral Side Effects of the AMPA Receptor Blocker Talampanel
Williams College
Hometown: Dresher, PA
Dr. Ingela L. Danielsson-Sanden,
Preceptor
Epilepsy Research Section

434 • Bawarjan Schatlo
Sodium Nitrite Therapy in Prolonged Cerebral Ischemia and Reperfusion in a Rat: Clinical, Histological, and MRI Findings
Rheinische Friedrich
Wilhelms Universitaet
Hometown: Bethesda, MD
Dr. Ryszard Pluta, Preceptor
Surgical Neurology Branch

435 • Michael J. Shen
The Induction of Malignant Glioma Apoptosis using Gene Therapy
Pikesville High School
Hometown: Baltimore, MD
Dr. John Park, Preceptor
Laboratory of Molecular and Cellular Neurobiology

436 • Devon A. Shook
Relating Monetary Rewards and Donation Profiles to Personal Beliefs: A Behavioral Study
Carnegie Mellon University
Hometown: Potomac, MD
Dr. Jorge Moll, Preceptor
Clinical Neurocardiology Section

437 • Elizabeth A. Slagle
Sensorimotor Gating in Restless Legs Syndrome
University of Minnesota
Hometown: Vermillion, SD
Dr. Elizabeth Peckham, Preceptor
Medical Neurology Branch

438 • Andrew L. Smith
Is Cortical Atrophy Related to Deep Gray Matter Atrophy in Multiple Sclerosis?
University of Toledo
Hometown: Cincinnati, OH
Dr. Francesca Bagnato, Preceptor
Neuroimmunology Branch

439 • John T. Stranix
Subacute Myeloperoxidase Levels Predict the Degree of Persistent Clinical Deficit following Cerebral Ischemia
University of Virginia
Hometown: Vienna, VA
Dr. Alison Baird,
Dr. Violet Wright, Preceptors
Stroke Branch

440 • Jamaal J. Taylor
Interactions of MIT Domains in Several Hereditary Spastic Paraplegia Proteins with Members of the CHMP Protein Family
Suncoast High School
Hometown: Riviera Beach, FL
Dr. Craig Blackstone, Preceptor
Cellular Neurology Unit

441 • Kevin Terry
Changes in Cortical Activity Related to Tics in Tourette Syndrome Patients
University of Texas at Austin
Hometown: Austin, TX
Dr. Masao Matsuhashi, Preceptor
Medical Neurology Branch

442 • Yaffa D. Wagschal, Ray Griffin
Clonogenic Analysis of Lineage Progression at Beginning and End of Neurogenesis in Embryonic Rat Cortex
Smith College
Pennsylvania State University
Hometown: Bethesda, MD
Bethesda, MD
Dr. Dragan Maric,
Dr. Jeffery L. Barker, Preceptors
Laboratory of Neurophysiology

443 • Nathaniel S. Woodling
Epigenetic Regulation of the SMN Promoter: Toward a Therapy for Spinal Muscular Atrophy
Emory University
Hometown: Laurel, MD
Dr. Charlotte J. Sumner;
Dr. Kenneth Fischbeck, Preceptors
Neurogenetics Branch

444 • John B. Xia
Tumor Expression of SCL Protein: A Proposal for the Basis of Organ Selectivity and Tumor Specificity in VHL Disease
University of Michigan
Hometown: Troy, MI
Dr. Alexander O. Vortmeyer,
Dr. Sven Glasker, Preceptors
Surgical Neurology Branch

445 • Peter J. Yang
Development of Graphical Tools for Analysis of Microarray Data
Rice University
Hometown: Silver Spring, MD
Dr. Yang C. Fann, Preceptor
Biostatistics Branch

446 • Kristy Yuan
Characterization of WHSC1 in Brain Tumors
University of Maryland
Hometown: Rockville, MD
Dr. Jie Li,
Dr. Zhengping Zhuang, Preceptors
Surgical Neurology Branch

National Institute on Aging (NIA)

447 • Stephen L. Berger

Linkage Disequilibrium in Human Populations
Richard Montgomery High School
Hometown: Darnestown, MD
Dr. John Hardy, Preceptor
Laboratory of Neurogenetics

448 • Andrew E. Bluher

Screening of a North American Parkinson Disease Cohort for NR4A2 Mutations
Centennial High School
Hometown: Ellicott City, MD
Dr. Andrew B. Singleton,
Ms. Janel O. Johnson, Preceptors
Laboratory of Neurogenetics

449 • Mary E. Burchett, Ana L.

Gustafson
The Use of Nude and Identifiable Photographs in Medical Genetics Textbooks: Ethical Considerations
Centre College
Brown University
Hometown: Winchester, KY
Fargo, ND
Dr. Nazli B. McDonnell,
Dr. Clair A. Francomano, Preceptors
Laboratory of Genetics

450 • Joy W. Chang

Characterization of the Drosophila Ortholog of the Mammalian Anti-apoptotic Protein Aven
Georgetown University
Hometown: Wexford, PA
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Laboratory of Experimental Gerontology

451 • Patrice N. Cook

Analysis of DNA Repair in Human Embryonic Stem Cells
University of Maryland Eastern Shore
Hometown: Abingdon, MD
Dr. Nadja C. Souza-Pinto, Preceptor
Laboratory of Molecular Gerontology

452 • Kelly R. Daigle

Identification and Validation of the Transcriptional Responses Controlled by Dj-1
North Carolina State University
Hometown: Raleigh, NC
Dr. Mark Cookson,
Dr. Marcel van der Brug, Preceptors
Laboratory of Neurogenetics

453 • Stephanie A. Dirla

Regulation of the Chromatin Remodeling Enzyme hSNF2L in a T Cell Line
McDaniel College
Hometown: Perry Hall, MD
Dr. Michael J. Pazin, Preceptor
Laboratory of Cellular and Molecular Biology

454 • Marissa D. Dixon

Plasma PGE2 Concentration in Patients with Bipolar Disorder: A Case Control Study
University of Maryland Eastern Shore
Hometown: Fort Washington, MD
Dr. Francesca Bosetti, Preceptor
Brain, Physiology and Metabolism Section

455 • Dustin T. Duncan

Prevalence and Trends of High-risk Health Behaviors among Older Americans, 1994-2004
Morehouse College
Hometown: Silver Spring, MD
Dr. Jack M. Guralnik,
Dr. Kushang V. Patel, Preceptors
Laboratory of Epidemiology, Demography and Biometry

456 • Stacey Dutton

Effect of Steroids on Stem Cell Neurogenesis, Development and Differentiation
University of Maryland Eastern Shore
Hometown: Baltimore, MD
Dr. Roy Cutler, Preceptor
Laboratory of Neurosciences

457 • Scott S. Emerson

The Effects of Caloric Restriction on Adenine and Pyridine Nucleotides
University of North Texas Health Science Center
Hometown: Baltimore, MD
Dr. Rafael deCabo, Preceptor
Laboratory of Experimental Gerontology

458 • Amanda French

Optimization of MCP-1 RNA Interference by siRNA in Rat Aortic VSMC: An Important Tool to Analyze Age-associated Arterial Remodeling Mechanisms
University of Maryland
Hometown: Jarrettsville, MD
Dr. Edward G. Lakatta,
Dr. Gaia Spinetti, Preceptors
Laboratory of Cardiovascular Science

459 • Laura M. Gabby

Radiographic Osteoarthritis of the Knee Is Associated with Electromyographic Features of Muscle Fatigue
Carnegie Mellon University
Hometown: Purcellville, VA
Dr. Shari M. Ling, Preceptor
Clinical Research Branch

460 • Elizabeth G. Gillenwater

Interaction of Site-specific Variants of XRCC1 with Other SSBR Proteins
Massachusetts Institute of Technology
Hometown: Towson, MD
Dr. David M. Wilson, Preceptor
Laboratory of Molecular Gerontology

461 • Rebecca L. Grammer

Developmental Mouse Gene Array
Johns Hopkins University
Hometown: Alton, IL
Dr. Judith Medoff, Preceptor
Laboratory of Neurosciences

462 • Ana L. Gustafson,
Mary E. Burchett
*Clinical Features of Ehlers-Danlos
Syndrome with and without
Collagen Mutations*
Brown University
Centre College
Hometown: Fargo, ND
Winchester, KY
Dr. Nazli B. McDonnell,
Dr. Clair A. Francomano, Preceptors
Laboratory of Genetics

463 • Robert A. Henderson
*Identification and Implication of
Signature and Shared Transcriptional
Features to the Functional States
of Naive and Memory CD8 T-cells
at Rest and upon Activation*
University of Pennsylvania
Hometown: Lexington, KY
Dr. Nan-ping Weng, Preceptor
Laboratory of Immunology

464 • Bridget E. Henn
*Correlation between Polymorphism in
RAGE Gene and Alzheimer's Disease*
Yale University
Hometown: Washington, DC
Dr. Lenore Launer;
Dr. Amanda Myers, Preceptors
Laboratory of Epidemiology,
Demography and Biometry

465 • Tara C. Howard
*Characterization of the Expression
Patterns of RNA Binding Proteins
in Mouse ES Cells*
University of Maryland
Hometown: Olney, MD
Dr. Minoru S. Ko,
Dr. Mark G. Carter, Preceptors
Laboratory of Genetics

466 • Jerry N. Hsieh
*Signal-to-noise Ratio and Resonance
Line Distortion in NMR Spectroscopy
using the Matched Filter and the TRAF
Function: Implications for Quantitation*
University of Virginia
Hometown: Reston, VA
Dr. Richard G. Spencer, Preceptor
Laboratory of Clinical Investigation

467 • Adrienne K. Jones
*Red Cell Oxidative Stress in
HANDS Subjects*
University of Maryland Eastern Shore
Hometown: Prince George, VA
Dr. Joy G. Mohanty, Preceptor
Molecular Dynamics Section

468 • Priti K. Julka
Generation of a Bcl-2 Lentivirus
Tufts University
Hometown: Lutherville, MD
Dr. Mark P. Mattson,
Dr. Marc Gleichmann, Preceptors
Laboratory of Neurosciences

469 • Jesse Karmazin
*Toward a Characterization of
Ectopic Expression of the Forkhead
Transcription Factor Foxl2 Required
for Ovarian Development*
Princeton University
Hometown: Baltimore, MD
Dr. Chris F. Ottolenghi, Preceptor
Laboratory of Genetics

470 • Lisa M. Kebejian
*Lipid and Proteomic Analysis
of Alzheimer's Disease*
Columbia University
Hometown: Towson, MD
Dr. Bronwen M. Martin,
Dr. Stuart R. Maudsley, Preceptors
Laboratory of Neurosciences

471 • Megan L. McCain
*Immunofluorescent Analysis of
Chemokine Trafficking*
Washington University, St. Louis
Hometown: Cohasset, MA
Dr. Fred E. Indig, Preceptor
Laboratory of Immunology

472 • Donnetta S. McFadden
*Determination of the Enantiomers
of Ifosfamide in Human Plasma using
Enantioselective Liquid Chromatography
with Mass Spectrometric Detection*
University of Maryland,
Baltimore County
Hometown: Joppatowne, MD
Dr. Irving Wainer, Preceptor
Laboratory of Clinical Investigation

473 • Lindsey M. Meister
*Effects of Acute Administration of
Dopaminergic Drug (D-amphetamine)
on Brain Phospholipase-A2-mediated
Signal Transduction in Control and
Parkinson Model Rats*
Northern Michigan University
Hometown: Wisconsin Rapids, WI
Dr. Abesh K. Bhattacharjee,
Dr. Stanley I. Rapoport, Preceptors
Brain, Physiology and
Metabolism Section

474 • Stuart O. Mushala
*High Fat, Protein, and Cholesterol
Diets: Neurophysiological Effects*
Brigham Young University, Idaho
Hometown: Rexburg, ID
Dr. Rafael deCabo, Preceptor
Laboratory of Experimental
Gerontology

475 • Tiffanny N. Newman
Chemokine-mediated Antigen Presentation
University of Maryland Eastern Shore
Hometown: Waldorf, MD
Dr. Arya Biragyn, Preceptor
Laboratory of Immunology

476 • Laura A. Novack
Evolutionary Conservation of RAG1-RAG2 Interactions
University of North Carolina
Hometown: Birmingham, AL
Dr. Sebastian Fugmann, Preceptor
Laboratory of Cellular and Molecular Biology

477 • Elaine L. Pranski
Effects of PTEN on mTOR Signaling
Washington College
Hometown: Baltimore, MD
Dr. Paritosh Ghosh,
Ms. Rachel Munk, Preceptors
Laboratory of Immunology

478 • Devin Rosenthal
Wnt5a Regulates MART1 in Melanoma Cells
University of North Carolina
Hometown: Baltimore, MD
Dr. Ashani T. Weeraratna, Preceptor
Laboratory of Immunology

479 • Ankita Saxena
Identification of Candidate Dopaminergic Inducing Factors
Centennial High School
Hometown: Baltimore, MD
Ms. Catherine M. Schwartz,
Dr. Mahendra S. Rao, Preceptors
Laboratory of Neurosciences

480 • Muthiah Vaduganathan
The Relationship between Osteoarthritis and Bone Mass in BLSA Families
Northwestern University
Hometown: Bellaire, TX
Dr. Shari M. Ling, Preceptor
Clinical Research Branch

481 • Adam C. Weber
Characterization of Multiple Nicotinic Receptor Subtypes by Bioaffinity Chromatography
Yale University
Hometown: Mobile, AL
Dr. Irving Wainer,
Dr. Ruin Moaddel, Preceptors
Laboratory of Clinical Investigation

482 • Ibardo Zambrano
Examination of DJ-1 Protein-protein Interactions in Mammalian Cells
Skidmore College
Hometown: Bethesda, MD
Dr. Mark Cookson, Preceptor
Laboratory of Neurogenetics

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

483 • William A. Ardanuy

*Probing Biological Membranes
with Fluorescence*

Montgomery Blair High School
Hometown: Silver Spring, MD
Dr. Drake Mitchell, Preceptor
Laboratory of Membrane
Biochemistry and Biophysics

484 • James A. Brown

*Gender Difference in Tissue Fatty
Acid Composition of Adult Rats Fed
Alpha-linolenate Adequate Diet*
Heights School
Hometown: Great Falls, VA
Dr. Norman Salem, Preceptor
Laboratory of Membrane
Biochemistry and Biophysics

485 • Sarah G. Calkins

*Localization of DNA Repair Proteins
in Susceptible Human Brain Cells
of DNA Repair Deficient Disorders*
University of Texas at Austin
Hometown: Austin, TX
Dr. Philip J. Brooks, Preceptor
Laboratory of Neurogenetics

486 • Brittany R. Copp

*Stress and Dominance in
Rhesus Macaques*
Tulane University
Hometown: Canterbury, NH
Dr. James D. Higley, Preceptor
Laboratory of Clinical Studies

487 • Michael T. Feyder

*Behavioral Phenotyping of Glutamate
(GluR1) Receptor Knockout Mice*
Vanderbilt University
Hometown: Rockville, MD
Dr. Andrew Holmes, Preceptor
Laboratory for Integrative
Neuroscience

488 • Justin B. Ganjei

*Social Alcohol Drinking In
Rhesus Macaques*
Virginia Polytechnic Institute
and State University
Hometown: Potomac, MD
Dr. James D. Higley,
Dr. Scott Chen, Preceptors
Laboratory of Clinical Studies

489 • Daniel E. Howell

*Ethanol Self-administration in
Rhesus Macaques: The Effects of
Stress and Rearing Condition*
Tulane University
Hometown: Tolleson, AZ
Dr. James D. Higley,
Dr. Scott Chen, Preceptors
Laboratory of Clinical Studies

490 • Katherine E. Meyers,

Mallika M. Thomas
*Visualization of CB1 Receptor-mediated
G Protein Activation in Mouse Brains
using GTP[gamma-35S] Autoradiography*
Haverford College
Los Alamitos High School
Hometown: Bethesda, MD
Seal Beach, CA
Dr. Markus Heilig, Preceptor
Laboratory of Clinical Studies

491 • Laura S. Shankman

*Rearrangement of Membrane
Phospholipids during
Neurotransmitter Stimulation*
University of Delaware
Hometown: Arlington, VA
Dr. Hee Yong Kim,
Dr. Yang Suk Kim, Preceptors
Laboratory of Membrane
Biochemistry and Biophysics

National Institute on Deafness and Other Communication Disorders (NIDCD)

492 • Kristen M. Danley

Selective and Divided Attention

Applied to Auditory-visual Stimuli

Bucknell University

Hometown: Germantown, MD

Dr. Barry Horwitz, Preceptor

Voice, Speech and Language Branch

494 • Tingting Gao

Identifying Genes that Affect

Mammalian Cochlear Development

W.T. Woodson High School

Hometown: Clifton, VA

Dr. Matthew Kelley, Preceptor

Laboratory of Cellular Biology

495 • Eric D. Schaffer

Investigating the Neurological

Basis of Visual Object Categorization:

A Computational Modeling Approach

Macalester College

Hometown: Washington, DC

Dr. Barry Horwitz, Preceptor

Voice, Speech and Language Branch

493 • Jaymi Della

Functional MRI Study of Gestural

Processing by Deaf and Hearing Subjects

University of Rochester

Hometown: Rushville, NY

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Dr. Fatima Husain, Preceptors

Voice, Speech and Language Branch

National Institute on Drug Abuse (NIDA)

496 • Usiwoma Abugo

The Relationship between Primitive Reflexes, Blood Flow, and EEG in Cocaine Users
University of Notre Dame
Hometown: Abingdon, MD
Dr. Ron Herning, Preceptor
Molecular Neuropsychiatry Branch

497 • Ope A. Asanbe

Methamphetamine (METH)-induced Gene Expression in the Frontal Cortex of Rats following an Escalating Dose Binge Regimen that Mimics Drug Intake by METH Abusers
Duke University
Hometown: Cookeville, TN
Dr. Jean Lud Cadet,
Ms. Devon Graham, Preceptors
Molecular Neuropsychiatry Branch

498 • Jennifer L. Burroughs

Methamphetamine and Beta Tubulin in Cardiac Tissue
Centennial High School
Hometown: Ellicott City, MD
Dr. Benvinda Dos Santos, Preceptor
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499 • Maria E. Carananti

Gene Expression of Cocaine-induced CPP in the Rat Striatum
Palm Beach Gardens High School
Hometown: West Palm Beach, FL
Mr. Mike McCoy, Preceptor
Molecular Neuropsychiatry Branch

500 • Christopher C. Day

In utero Methamphetamine Exposure Causes Significant Alterations in Gene Expression in Adult Male Rat Cortex
University of Maryland,
Baltimore County
Hometown: Springfield, VA
Dr. Jean L. Cadet,
Dr. Pierre A. Noailles, Preceptors
Molecular Neuropsychiatry Branch

501 • Andre R. Durham

Using Northern Blot and PCR to Identify a Novel Gene Expression
Howard High School
Hometown: Baltimore, MD
Dr. Ning Sheng Cai,
Dr. Jean Lud Cadet, Preceptors
Molecular Neuropsychiatry Branch

502 • Jacob E. Hartman

The Effects of in utero Methamphetamine Exposure on Gene Expression in Developing Rat Cortex
Duke University
Hometown: Marriottsville, MD
Dr. Pierre A. Noailles,
Dr. Jean Lud Cadet, Preceptors
Molecular Neuropsychiatry Branch

503 • Neel S. Joshi

Differential Effects of Delta Opioid Agonists on G Protein Expression in CHO Cells Expressing the Cloned Human Delta Opioid Receptor
Henry M. Gunn Senior High School
Hometown: Palo Alto, CA
Dr. Heng Xu, Preceptor
Medications Discovery
Research Branch

504 • Peter G. Kardel

Locomotor Effects of Putative Dopamine D3 Receptor Antagonists
American University
Hometown: Washington, DC
Dr. Jonathan L. Katz,
Dr. Matthew J. O'Callaghan, Preceptors
Medications Discovery
Research Branch

505 • Brittany E. Kelly

Recruitment of Adolescents in a Baltimore Tobacco Cessation Study
Western High School
Hometown: Baltimore, MD
Dr. Eric T. Moolchan, Preceptor
Molecular Neuropsychiatry Branch

506 • Benjamin N. Khazan

Characteristics of Drug Users Reporting to an Urban Hospital Emergency Department
University of Virginia
Hometown: Owings Mills, MD
Dr. David A. Gorelick,
Dr. Marc Copersino, Preceptors
Clinical Pharmacology and Therapeutics Research Branch

507 • Michael E. Kiyatkin

The Role of NAALADase Inhibitors in Cocaine Addiction
University of Maryland
Hometown: Cockeysville, MD
Dr. Eliot Gardner, Preceptor
Behavioral Neuroscience Branch

508 • Veronica F. Krehbiel

Psychiatric Treatment History and Drug Preference in Drug Abuse Research Applicants
University of Maryland,
Baltimore County
Hometown: Baltimore, MD
Ms. Judith M. Hess,
Dr. Carlo S. Contoreggi, Preceptors
Molecular Neuropsychiatry Branch

509 • Kenneth H. Levin

Longitudinal ECG Changes in Cocaine Users during Withdrawal
Johns Hopkins University
Hometown: Baltimore, MD
Dr. David A. Gorelick,
Dr. Marc Copersino, Preceptors
Clinical Pharmacology and Therapeutics Research Branch

510 • Jocelyn D. McKenzie

The Effects of Gene NrCAM Knockout on Measures of Anxiety and Learning
North Springs High School
Hometown: East Point, GA
Dr. George R. Uhl,
Dr. Frank S. Hall, Preceptors
Molecular Neurobiology Branch

- 511 • Roger B. Murayi**
The Effects of V73 Gene Knockout on Measures of Anxiety and Learning
Mount Hebron High School
Hometown: Ellicott City, MD
Dr. George R. Uhl,
Dr. Scott F. Hall, Preceptors
Molecular Neurobiology Branch
- 512 • Ameet S. Nagpal**
Interaction of Neurotoxic and Non-neurotoxic Amphetamines and Phenylpiperazines at the Vesicular Monoamine Transporter
New York Medical College
Hometown: Port Jervis, NY
Dr. Richard B. Rothman,
Dr. John Partilla, Preceptors
Cellular Neurobiology Research Branch
- 513 • Cameron L. Noland**
The Effects of Cocaine Training Dose on the Subjective Effects of Dopamine Uptake Inhibitors
Carleton College
Hometown: Baltimore, MD
Dr. Jonathan L. Katz,
Dr. Matthew J. O'Callaghan, Preceptors
Medications Discovery Research Branch
- 514 • Motunrayo O. Ogunkua**
Effect of Salvinorin A Analogs on Opioid Receptors
Plymouth Whitemarsh High School
Hometown: Plymouth Meeting, PA
Dr. Richard B. Rothman,
Ms. Christina Dersch, Preceptors
Clinical Pharmacology and Therapeutics Research Branch
- 515 • Kyle B. Pfeiffer**
A Morphological Analysis of Neuronal Structural Differences in the Cortex of Rats Exposed to Methamphetamine in utero
University of Maine
Hometown: Baltimore, MD
Dr. Jean L. Cadet,
Dr. Pierre A. Noailles, Preceptors
Molecular Neuropsychiatry Branch
- 516 • Jeanine D. Pollard**
Mapping Neuronal Activity Using Manganese-enhanced MRI
Notre Dame Preparatory School
Hometown: Baltimore, MD
Dr. Elliot A. Stein,
Dr. Hanbing Lu, Preceptors
Neuroimaging Research Branch
- 517 • Katherine M. Prevatt**
Design and Synthesis of Molecular Tools for the Dopamine D3 Receptor
Emory University
Hometown: Broken Arrow, OK
Dr. Amy Newman,
Dr. Peter Grundt, Preceptors
Medications Discovery Research Branch
- 518 • Yanique I. Rattigan**
Amphetamine Causes Activation of Cell Cycle Related Proteins in the Striatum
University of Maryland Eastern Shore
Hometown: Oxon Hill, MD
Dr. Irina N. Krasnova, Preceptor
Molecular Neuropsychiatry Branch
- 519 • Steven Schech**
Do Specific Life Stressors Predict Substance Use?
Mount St. Mary's University
Hometown: Baltimore, MD
Dr. Michelle Leff, Preceptor
Neuroimaging Research Branch
- 520 • Adam J. Setren**
Phosphorylation of Calcium/calmodulin Kinase IV following Acute and Repeated Cocaine Administration to Rats
Vanderbilt University
Hometown: Baltimore, MD
Dr. Bruce T. Hope, Preceptor
Behavioral Neuroscience Branch
- 521 • Glenda N. Smiley**
Gene Delivery to the Rodent Brain using Different Adeno-associated Viral Vector Serotypes
Barnard College
Hometown: Philadelphia, PA
Mr. Brandon K. Harvey,
Dr. Yun Wang, Preceptors
Molecular Neuropsychiatry Branch
- 522 • Jasmine A. Taylor**
Effects of Benztrapine Analogues and Cocaine on Feeding Behavior in Rats
Chamblee High School
Hometown: Decatur, GA
Dr. Rajeev I. Desai, Preceptor
Medications Discovery Research Branch
- 523 • Sneha Tella**
Cardiovascular Effects of Adenosine Agonists Following Chronic Caffeine
Atholton High School
Hometown: Clarksville, MD
Dr. Charles W. Schindler, Preceptor
Behavioral Neuroscience Branch
- 524 • Stephanie M. Tolbert**
Effects of Tetrahydrocannabinol (THC) and Cocaine on the Immune System
Goucher College
Hometown: Baltimore, MD
Dr. Ronald Herning, Preceptor
Molecular Neuropsychiatry Branch

525 • Ugochi J. Ukegbu
Derivatization of MDMA for GC/MS Analysis
Riverdale Country Day School
Hometown: Bronx, NY
Dr. Marilyn A. Huestis,
Dr. Ross Lowe, Preceptors
Clinical Pharmacology and
Therapeutics Research Branch

526 • Steven J. Voskanian
Adverse Events and Pre-existing Morbidity in Drug-using Participants
New York Medical College
Hometown: Long Beach, CA
Dr. Kenzie Preston, Preceptor
Clinical Pharmacology and
Therapeutics Research Branch

527 • Elizabeth Waring
Role of MAP Kinase in the Synaptic Adaptations to Delta-9-THC
Oberlin College
Hometown: Columbus, OH
Dr. Carl Lupica,
Dr. Alex Hoffman, Preceptors
Cellular Neurobiology Research Branch

528 • Kristina A. Wihbey
A Rat Model of Relapse to Palatable Food-seeking Behavior
Franklin and Marshall College
Hometown: Orono, ME
Dr. Yavin Shaham, Preceptor
Behavioral Neuroscience Branch

529 • Lauren N. Wilson
Screening for Potential Non-addicting Opioid Analgesics
Abington Friends School
Hometown: Yardley, PA
Dr. Richard B. Rothman,
Dr. Moses L. Williams, Preceptors
Clinical Pharmacology and
Therapeutics Research Branch

530 • Mu Yang
Association Study of Vesicular Monoamine Transporter 2 (VMAT2) Haplotype and Methylation Levels
Swarthmore College
Hometown: Ellicott City, MD
Dr. Tim Liu, Preceptor
Molecular Neurobiology Branch

531 • Jaime L. Zerhusen
Does Recent Marijuana and/or Alcohol Use Influence the Likelihood of Cigarette Use in Adolescent Smokers?
Davis and Elkins College
Hometown: Baltimore, MD
Dr. Eric T. Moolchan, Preceptor
Clinical Pharmacology and
Therapeutics Research Branch

532 • Helen Zhang
Comparison of Adeno-associated Viral Vector Serotypes 1, 2, 5, and 6 for Gene Transfer to Neurons and Glia in vitro
Centennial High School
Hometown: Ellicott City, MD
Mr. Brandon K. Harvey, Preceptor
Molecular Neuropsychiatry Branch

National Library of Medicine (NLM-LHNCBC)

533 • Yi Zhao

*Biomedical Application of an Open
Source Computerized Telephony System*
University of Maryland,
Baltimore County
Hometown: Rockville, MD
Dr. R.P.C. Rodgers, Preceptor
Office of High Performance Computing
and Communications

NIH Clinical Center (CC)

534 • Daveta L. Bailey

*Mixing the Old and the New:
Stem Cell Therapy*

North Carolina Central University
Hometown: Oxon Hill, MD
Mr. Christopher Egelebo, Preceptor
Nursing Department

535 • Christopher F. Basil

*High Throughput Genomics for
Cancer Biomarker Discovery*

St. Albans School
Hometown: Chevy Chase, MD
Dr. Francesco M. Marincola,
Dr. Ena Wang, Preceptors
Department of Laboratory Medicine

536 • Marge M. Benham-Hutchins

*Design Efficiencies and Satisfaction
of Computerized Provider Order
Entry: A Comparison of Two Order
Entry Methods*

University of Arizona
Hometown: Euless, TX
Dr. Carol A. Romano,
Ms. Charlotte Seckman, Preceptors
Department of Clinical Research
Informatics

537 • Kimberly Benson

*Peak Muscle Force and Gait Kinematics
in Subjects with Inclusion Body Myositis*
Northeastern University
Hometown: Moscow, PA
Dr. Michael Harris-Love, Preceptor
Rehabilitation Medicine Department

538 • Hansen J. Brian

*Identification of a New KEL Polymorphism:
Implications for Genotyping Red Blood
Cell Jsa and Jsb Antigens*
St. John's University
Hometown: White Bear Lake, MN
Dr. David Stroncek, Preceptor
Department of Transfusion Medicine

539 • Nina N. Brodsky

*FOXP3 Expression in
Patients with Autoimmune
Lymphoproliferative Syndrome*
University of Maryland
Hometown: Rockville, MD
Dr. Joao B. Oliveira,
Dr. Thomas A. Fleisher, Preceptors
Department of Laboratory Medicine

540 • David Chen

*The Measurement and Segmentation
of Uterine Fibroid using Magnetic
Resonance Imaging*
Johns Hopkins University
Hometown: North Hollywood, CA
Dr. Jack Yao, Preceptor
Diagnostic Radiology Department

541 • Jacob F. Collins

*CRIS: Management of System
Configuration Changes*
University of Alabama
Hometown: Birmingham, AL
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Department of Clinical Research
Informatics

542 • Daniel Conway

PDB's Virtual Functional Anatomy Lab
New York College of
Osteopathic Medicine
Hometown: Bethesda, MD
Dr. Frances Sheehan, Preceptor
Rehabilitation Medicine Department

543 • Anne Ferruggiaro

*IBM: The Natural History of Dysphagia,
Oral Motor and Speech Functions*
University of Maryland
Hometown: Burtonsville, MD
Ms. Beth Solomon, Preceptor
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544 • Shawna M. Gearhart

*Brief Assessment of Motor Function
(BAMF): Content Validity and Reliability
of the Oral-motor Scales*
Pennsylvania State University
Hometown: Bloomsburg, PA
Dr. Holly L. Cintas,
Ms. Rebecca A. Parks, Preceptors
Rehabilitation Medicine Department

545 • Melanie L. Gehman

*Persons with Neonatal Onset Multisystem
Inflammatory Disease: Activities of Daily
Living Performance and Response to
Treatment with Anakinra*
University of Maryland
Hometown: Shamokin Dam, PA
Ms. Hanna L. Hildenbrand, Preceptor
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546 • Daniel B. Goltz

*Matrix Bias on Testosterone: Effect
of Lipoproteins on Measurement
of Testosterone*
University of Maryland,
Baltimore County
Hometown: Bethesda, MD
Dr. Alan T. Remaley, Preceptor
Department of Laboratory Medicine

547 • Sharon Greenblum

Wavelet Analysis in Virtual Colonoscopy
Northwestern University
Hometown: Kensington, MD
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Diagnostic Radiology Department

548 • Daniel J. Helman

*Expression and Purification of the
Major Surface Glycoprotein of
Pneumocystis murina*
Sidwell Friends School
Hometown: Bethesda, MD
Dr. Joseph Kovacs, Preceptor
Critical Care Medicine Department

549 • Jennifer L. Hicks, Kavita Poddar
Examining the Nutrition Care Process at the NIH Clinical Center: A Step Toward Benchmarking Screening and Assessment
University of Massachusetts
Virginia Polytechnic Institute and State University
Hometown: Amherst, MA
Blacksburg, VA
Ms. Madeline Michael, Preceptor
Nutrition Department

550 • Elizabeth K. Hoddeson
Microparticles: The Key to Hypercoagability of Sickle Cell Disease Patients?
Medical College of Georgia
Hometown: Alpharetta, GA
Dr. McDonald K. Horne, Preceptor
Department of Laboratory Medicine

551 • Brittany M. Holt
Differences in Clot Lysis between Fingerstick and Venepuncture Blood: Possible Roles of Matrix Metalloproteinases
College of William and Mary
Hometown: Leesburg, VA
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Department of Laboratory Medicine

552 • Victoria Hsu
Optimization of Liposomal Delivery of Oligonucleotides
West Shore Junior-Senior High School
Hometown: West Melbourne, FL
Dr. Irina Panyutin,
Dr. Igor Panyutin, Preceptors
Positron Emission Tomography Department

553 • Kevin Jenner
Analysis of EEG/EMG Signal Coherence in Subjects at Various Stages of Development with and without Cerebral Palsy
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554 • David O. Jones
Retrospective Analysis of Vascular Access Devices Placed at the NIH Clinical Center over an 8 Year Period
Boston University School of Medicine
Hometown: Salem, VA
Dr. Brad Wood, Preceptor
Diagnostic Radiology Department

555 • Mameisia Kabia
Enhanced Regression in a Squamous Cell Carcinoma Murine Tumor Model using Pulsed-HIFU and Naked TNF- α Plasmid
Lawrence High School
Hometown: Lawrence, NJ
Dr. Victor Frenkel, Preceptor
Diagnostic Radiology Department

556 • Anastasiya V. Karamysheva
Optimization Methods of Intra-nuclear Oligonucleotide Delivery for Cellular DNA Targeting
University of Maryland
Hometown: Derwood, MD
Dr. Irina Panyutin, Preceptor
Imaging Sciences Program

557 • Matt Kelsey
Performance Tuning and Validation of Candidate Determination for Computer-aided Detection of Colon Polyps
Southern Illinois University
Hometown: North Aurora, IL
Dr. Ingmar Bitter, Preceptor
Diagnostic Radiology Department

558 • Nadia V. Kulshina
The Effect of Simulated Radiation-induced 3'-blocking Groups on Human DNA Double-strand Break Repair
Moscow State University
Hometown: Portland, ME
Dr. Thomas A. Winters, Preceptor
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559 • Christopher Lumping
One Step Closer to the Design of an Ideal Passive Dynamic Ankle Foot Orthosis
University of Massachusetts Dartmouth
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Dr. Steven J. Stanhope, Preceptor
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560 • Tami S. Maes
The Quality of Psychological and Physiological Health of Patients Diagnosed with ETOH Disorders
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Mr. Mark J. Mattiko, Preceptor
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Pediatric FDI Spasticity
Pennsylvania State University
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562 • Kimberly S. McGhee
Adults and Alcoholism: Women versus Men
Morgan State University
Hometown: Clinton, MD
Ms. Rosa J. Clark,
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563 • James L. Papadatos
A Case Series of Adrenal Insufficiency and Cushingoid Symptoms in Patients Receiving Itraconazole and Low-dose Steroids
University of Maryland
Hometown: Baltimore, MD
Dr. Melinda M. Neuhauser, Preceptor
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564 • Caroline B. Phillips
The Prevention and Early Detection of Postpartum Depression in Hispanic Women
Catholic University of America
Hometown: Washington, DC
Ms. Margaret F. Bevans, Preceptor
Nursing Department

565 • Blake C. Riddick
Development of OS-EM Reconstruction Software for Nuclear Medicine SPECT Scanners
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566 • Susanne M. Roberts
Linezolid-resistant Staphylococcus aureus: A Molecular and Epidemiological Study
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Hometown: Alexandria, VA
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567 • Scott Rudzinski
Association between Degree of Skeletal Disease Burden Score with Range of Motion, Manual Muscle Test, and 9 Minute Walk Test in People with Fibrous Dysplasia
New York Medical College
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568 • Kinjalika Sathi
Coupled Force Sense in Single and Bi-articular Muscles
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Hometown: Englewood, CO
Dr. Timothy Brindle, Preceptor
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569 • Aaron P. Selikson
Calculating Degrader Properties using Natural Copper for Energy Determination in the GE Cyclotron
Johns Hopkins University
Hometown: Radnor, PA
Dr. Paul Plascjak, Preceptor
Positron Emission Tomography Department

570 • Alexa J. Siddon
Immunophenotypic Analysis of Bone Marrow Aspirates from Patients with Systemic Mastocytosis
State University of New York
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Hometown: Massena, NY
Dr. Irina Maric, Preceptor
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571 • Sharanie V. Sims
Strategies to Monitor and Reduce IV Waste
Howard University
College of Pharmacy
Hometown: Cleveland, OH
Mr. Robert DeChristoforo,
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572 • Lauren E. Troxel
Breaking Your Back at Work? A Look at Some New Back-saving Patient-moving Devices
University of Maryland,
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Hometown: Mount Rainier, MD
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573 • Amy R. Zolko
The Functional Performance of Children with Smith-Magenis Syndrome
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Office of the Director/Office of Intramural Research (OD/OIR)

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576 • Lori M. Dorward

Assessing Preservation of 3-D Subcellular Structures by Electron Tomography
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Investigating the Effect of Flow Conditions on the Function of a Microfluidic Immunoassay
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Applications of Recovery-enhanced Infrared Imaging
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Optimizing Antibody Immobilization for a Reusable Flow-through Immunoassay
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580 • Robert M. Sorbello

Recycling Immunoadsorbent Device for Multi-analyte Analysis using Microarray Technology
Winston Churchill High School
Hometown: Potomac, MD
Dr. Paul D. Smith,
Dr. Terry M. Phillips, Preceptors
Division of Bioengineering and Physical Science

Index of Participants

Usiwoma Abugo	496	Nina N. Brodsky	539	Lauren Costello	305
AbdulRasheed A. Alabi	388	Elizabeth B. Brokaw	575	Maureen Cox	187
Omolade O. Alawode	11	John R. Brooks	23	Meredith M. Coyle	306
Jennifer S. Allen Brooks	239	James A. Brown	484	Matthew J. Crisp	396
Diana E. Amariei	12	Kasima Brown	182, 214	Cynthia K. Crosswhite	307
Dipan Amin	13	Lecia A. Brown	183	Melissa E. Crowder	347
William A. Ardanuy	483	Nicholas E. Bruns	118	Luciann L. Cuenca	32
Sruthi R. Arepalli	338	Christine A. Buras	119	Adolfo A. Cuesta	188
Nicole M. Armstrong	389	Mary E. Burchett	449, 462	Ramsey Daher	348
Carmen B. Arze	178	Diondra T. Burney	342	Elizabeth S. Dahlquist	245
Ope A. Asanbe	497	Jennifer L. Burroughs	498	Kelly R. Daigle	452
Daniel E. Ashley	114	Tracy R. Butler	393	Monique Dalton	349
Benjamin A. Ashwell	14	Sarah G. Calkins	485	La France Daniels, Jr.	308
Holly K. Asmussen	15	Leah R. Calvo	24	Kristen M. Danley	492
David J. Auerbach	115	Jason L. Campbell	25	Jimmy H. Daruwalla	217
Nazanin Azizian	16	Zeke M. Campell	394	Brenda Davis	309
Daveta L. Bailey	534	Guangyu Cao	120	Christopher C. Day	500
Natalia A. Balko	94	Emily Capra	26	Jaymi Della	493
Sachini N. Bandara	179	Maria E. Carananti	499	Christine R. DeLong	189
Lauren B. Banks	180	Bonnie E. Carlson	27	Wei-Li Deng	190
Angel M. Barber	240	Michelle M. Carlton	242	Rohit K. Dewan	246
Gregory O. Bascug	17	Patrick Chaing	95	Marlen Diaz	97
Christopher F. Basil	535	Elaine Chan	121	Stephanie A. Dirla	453
Kyle Basques	241	Joy W. Chang	450	Hozefa A. Divan	83
Elizabeth E. Baumel	390	Dana L. Charles	343	Marissa D. Dixon	454
Jeannette M. Beasley	116	Michael M. Chau	243	Lori M. Dorward	576
Maria N. Beckford	181	Christopher R. Cheatham	344	Dustin T. Duncan	455
Tori O. Begay	301	David Chee	303	Anastasie M. Dunn-Pirio	397
Kiran Belani	290	David Chen	28, 540	Andre R. Durham	501
Amanda B. Bell	302	James X. Chen	345	Stacey Dutton	456
Rachel C. Bell	391	Yun-Yun K. Chen	184	Aileen M. Echiverri	350
Marge M. Benham-Hutchins	536	Christopher F. Chesley	29	Michelle C. Eckman	218
Jihane N. Benhammou	18	Ea Chen (lan) Chiang	216	David J. Einstein	398
Kimberly Benson	537	Daniel Chien	185	Dina Elezzer	351
Stephen L. Berger	447	Elaine N. Chow	291	Casey Ellis	359
Simone E. Berkower	2	Sarah J. Choyke	30	Chelsea L. Ellis	122
Michael J. Berlin	339	Dana E. Christofferson	395	Scott S. Emerson	457
Kiran N. Bhat	19	Everis H. Clarke, Jr.	244	Melvina S. Evereklian	335
Arter L. Biggs	340	Billy M. Clifford-Nunn	304	Kimberly A. Everett	219
Anna B. Binstock	341	Elizabeth Cline	162	Lesley A. Everett	247
Chelsea M. Black	20	Genevieve C. Cody	346	Nicholas L. Evoy	248
Kevin G. Blas	21	Casey Coleman	31	Dina A. Faddah	163
Andrew E. Bluher	448	Danielle L. Colley	186	Benjamin C. Falk	249
Susan P. Bothwell	161	Jacob F. Collins	541	Anne Ferruggiaro	543
Luciann Bracero	215	Susan Combs	82	Michael T. Feyder	487
Justin S. Brandt	117	Megan E. Conroy	96	Elizabeth H. Finn	164
Jillian M. Brauth	392	Daniel Conway	542	Vanessa J. Flores	352
Daniel M. Breedlove	22	Patrice N. Cook	451	David M. Fox	353
Hansen J. Brian	538	Brittany R. Copp	486	Nolan A. Fox	220

Amanda French	458	Carey A. Heller	360	Benjamin R. Kaplan-Singer	293
Amy L. French	412	Randi E. Heller	407	Anastasiya V. Karamysheva	556
Teresa Fu	250	Daniel J. Helman	548	Peter G. Kardel	504
Lisa M. Fucito	354	Robert A. Henderson	463	Jesse Karmazin	469
Stephen J. Furlani	399	Bridget E. Henn	464	Lisa M. Kebejian	470
Laura M. Gabby	459	Charisse O. Henry	127	Nell Keith	42
Justin B. Ganjei	488	Brian D. Herman	191	Brittany E. Kelly	505
Tingting Gao	494	Khalisa N. Herman	255	Matt Kelsey	557
Edwin J. Garcia-LaTorre	123	Jesus Hernandez-Burgos	312	Michael G. Kennedy	43
Michael Gaskins	355	Jennifer L. Hicks	549	Sarah C. Kennedy	193
Melanie A. Gasper	400	Tina Ho	361	Sara Khaghani	87
Shawna M. Gearhart	544	Elizabeth K. Hoddeson	550	Utsha Khatri	294
Melanie L. Gehman	545	Casey J. Holliday	408	Benjamin N. Khazan	506
Elissa Gerfen	165	Brittany M. Holt	551	Alison B. Kidwell	364
David A. Germain	33	Lindsey M. Hoskins	85	Ji Heon Kim	132
Lesley-Ann Giddings	310	Regan A. Howard	86	Nancy Kim	261
Elizabeth G. Gillenwater	460	Tara C. Howard	465	Sarah N. Kim	131
Davis Glasser	401	Daniel E. Howell	489	Stephanie H. Kim	413
Nahal Golpayegani	402	Jonathon R. Howlett	256	Itamar Kimchi	44
Daniel B. Goltz	546	Jerry N. Hsieh	466	Michael E. Kiyatkin	507
Adam J. Gomez	311	Victoria Hsu	552	Joyce M. Koh	91
Teresa Gomez	34	June Hu	257	Donnie J. Konovsky	579
Mercede E. Gorham	356	Ranliang Hu	409	Benjamin Korman	98
Amrita Goyal	35	Rwo-Wen Huang	258	John Kot	45
Rachelle L. Graham	36	Jessica A. Hui	313	Sarah K. Kozar	262
Rebecca L. Grammer	461	Austin Y. Ihm	577	Mark Krakauer	223
Julia W. Gray	84	Gregory H. Ihrie	578	Veronica F. Krehbiel	508
Vernelle V. Grays	37	Irina C. Ilie	410	Nadia V. Kulshina	558
Sarah M. Greenblatt	38	Osarimabo I. Imoisili	362	Abhinav Kumar	3
Sharon Greenblum	547	Nader Jameel	259	Gokul N. Kumar	414
Samantha L. Greene	349	Kathryn Jarvis	411	Pramukta Kumar	133
Ray Griffin	442	Kevin Jenner	553	Carl Kunda	263
Rebecca M. Grochow	403	Anandhi P. Jeyabalan	260	Shivani Lamba	415
Daniel Groepper	124	Lisa C. Ji	128	Zhao E. Lan	88
Sarah Groner	357	Constance H. Jin	292	Sally R. Lanar	46
Rozalina Grubina	125	Daozhong Jin	166	Katherine S. Larabee	194
Ana L. Gustafson	449, 462	Jimmy Johannes	129	Danielle R. Large	195
Duc M. Ha	39	Adam T. Jones	40	Annie M. Le	224
Lauren A. Hackney	358	Adrienne K. Jones	467	Elizabeth J. Le	365
Heraa S. Haj-Elsafi	251	Alex S. Jones	222	Alexis Lebron	89
Theresa C. Hamer	404	David O. Jones	554	Elizabeth M. Leddy	295
Heather D. Hardway	221	Ethan G. Joseph	314	John B. Lednak	366
Christopher W. Harris	359	Neel S. Joshi	503	Kendra E. Leigh	367
Kelley Harris	252	Michelle T. Joy	412	Daniel E. Leland	368
Parvana A. Hartenstein	405	Priti K. Julka	468	Kenneth H. Levin	509
Jacob E. Hartman	502	Mameisia Kabia	555	David L. Levitt	416
Stefanie L. Hartman	126	Carmella B. Kahn	41	Erik Z. Li	33
Salar Hazany	406	Reva Kakkar	130	Weiyu Li	47
Janice J. He	254	Shivkumar Kambhampati	192	Yaojiefu J. Li	134
Shiwei He	253	Eugene Kang	363	Eben I. Lichtman	264

Rachel Lieber	7	Anudeep Mukkamala	52	Elaine L. Pranski	477
Anna W. Liebowitz	99	Marisa-Claire Mumford	197	Katherine M. Prevatt	517
Jolinta Y. Lin	167	Sunni L. Mumford	269	Margaret R. Pruitt	57
Joyce Y. Lin	417	Roger B. Murayi	511	Mary Ella C. Pruitt	145
Christine J. Liow	369	Kimberly M. Murdaugh	374	Steven J. Quinn	201
Darya A. Litvinchuk	370	Alison A. Murphy	53	Erin M. Quist	146
Frederick Liu	296	Heather M. Murphy	317	Brook E. Ragle	202
Yang Liu	418	Stuart O. Mushala	474	Govind Rangrass	203
Alexander S. Lo	265	Laura Myers	138	Srikan Rao	319
Elana K. Lowell	297	Wazo Z. Myint	318	Farzin Rashti	431
Ning Lu	196	Christopher Nabel	424	Jeremy Rassen	272
Christopher Lumping	559	Elisa M. Nabel	170	Yanique I. Rattigan	518
Amanda R. Lurie	371	Ameet S. Nagpal	512	Renee L. Raville	375
Rami Maarouf	225	Mukil Natarajan	425	David Rawnsley	102
Tami S. Maes	560	Jill M. Neiman	426	Ziba Razinia	58
Sara Maguire	419	Tiffany N. Newman	475	Yuanyuan Ren	204
Kathryn N. Maher	266	Cuong T. Nguyen	141	Catherine L. Reynolds	432
Saiyid S. Mahmood	267	Jonathan V. Nguyen	140	Blake C. Riddick	565
Benjamin S. Mantell	135	Quang Nguyen	139	Lance D. Robert	231
Brittney A. Manville	226	Vina H. Nguyen	229	Susanne M. Roberts	566
Clifford M. Marks	48	Christopher R. Nicholas	427	Alan R. Rodrigues	433
Valeria T. Martinez	372	Pingting Nie	270	David Rogawski	147
Nina D. Mastracci	49	Cameron L. Noland	513	Brittany A. Rolle	59
Brian S. Mathias	373	Laura A. Novack	476	Giselle Roman	60
Benjamin T. Mautner	50	Ryan W. Novince	230	Jennifer M. Romanek	299
Kristen R. Maynard	420	Katherine E. O'Leary	428	Andre D. Rosario	61
Olive Mbah	51	Motunrayo O. Ogunkua	514	Devin Rosenthal	478
James R. McAuley	136	Ashley N. Owen	171	Matthew W. Ross	62
Megan L. McCain	471	Josh P. Owings	198	Scott Rudzinski	567
Thomas E. McCann	137	Johnny Pang	142	Mark R. Ryherd	205
Erin M. McClellan	421	James L. Papadatos	563	Cheryl Saddler	63
Matthew J. McConnell	561	Arti Parekh	143	Azize Sahin	103
Donnetta S. McFadden	472	Philip G. Parham	271	Shelley Sahu	273
Kimberly S. McGhee	562	Jean Y. Park	54	Maher Salahi	206
Joshua McHugh	315	Erin M. Parry	172	Yasmin Salehizadeh	320
Jocelyn D. McKenzie	510	Michael J. Paskow	199	Rita Salloum	51
Lindsey M. Meister	473	Rebecca Z. Pass	90	Jasmine L. Salters	376
Katherine E. Meyers	490	Gopal A. Patel	144	Rajeev Samtani	104
Darby Miller	422	Pooja N. Patel	8	Sonia R. Samtani	104
Stephanie E. Miller	168	Kartik Pattabiraman	429	Zalya Sanchez-Galvan	64
Haik Mkhikian	423	Cynthia R. Peng	298	Kinjalika Sathi	568
Jason B. Monroe	336	Ryan B. Perkins	430	Lindsay R. Saunders	274
Vanessa Montalvo	100	Alanna C. Peterson	200	Ankita Saxena	479
Carolina M. Montano	227	Kyle B. Pfeiffer	515	Kelly W. Scarborough	4
Denise L. Mooney	101	Caroline B. Phillips	564	David S. Scavo	65
Marlesa R. Moore	574	Alexandra T. Pinckney	55	Eric D. Schaffer	495
Matthew D. Moravec	316	Kavita Poddar	549	Bawarjan Schatlo	434
Amanda J. Morris	169	Ginger Polich	92	Steven Schech	519
Siti N. Morris	268	Jeanine D. Pollard	516	Kristin L. Schmid	105
Jeffrey M. Mufson	228	Holly A. Porter	56	Benjamin S. Scruggs	321

Sonia Sekhar	106	Neel S.Talwar	I	Nancy Wang	285
Heather M. Selby	66	Ekta Taneja	235	Siyuan Wang	110
Eva S. Seligman	207	Karis R.Tang-Quan	153	Elizabeth Waring	527
Aaron P.Selikson	569	Erin M.Taylor	71	Felicia Washington	240
Adam J. Setren	520	Jamaal J.Taylor	440	Amy Wasterlain	176
Ali N. Shabestari	275	Jasmine A.Taylor	522	Lisa M.Watanabe	286
Manjool M. Shah	67	Jill L.Taylor	328	Adam C.Weber	481
Laura S. Shankman	491	Justin Taylor	329	Dan E.Webster	177
Aaron Shapiro	9	Kira C.Taylor	280	Daniel A.Weisz	156
Pooja Sharma	107	Dmitry Tchaplynikov	154	Aonor M.Wesley	236
Michael J. Shen	435	Sneha Tella	523	Suzanne H.Westbrook	111
Alexandra Y. Shin	323	Rachel Tepper	379	Sanese K.White	331
Benjamin J. Shin	322	Kevin Terry	441	Kristina A.Wihbey	528
John Y. Shin	232	Bobby M.Thomas	174	Reginald L.Williams	79
Adam R. Shoffner	208	Joel W.Thomas	155	Lauren N.Wilson	529
Devon A. Shook	436	Mallika M.Thomas	490	Robert W.Wise	387
Alexander N. Shoushtari	68	Joseph G.Thumpasery	6	Nicole J.Wolf	287
Alexa J. Siddon	570	Jessica I.Tilghman	380	Nathaniel S.Woodling	443
Elise M. Siegel	324	Joanna K.Timmer	210	Brian W.Wu	157
Laura C. Sillers	337	Victoria L.Tkacz	72	James Wylie	237
John K. Simmons	69	Stephanie M.Tolbert	524	John B.Xia	444
Sharanie V. Sims	571	Nicholas M.Tompkins	281	Mary Jue Xu	211
Katherine E. Sinele	148	Kelly A.Townsend	381	Qing Yan	112
Jaskaran Singh	233	Thuy T.Tran	73	Hailiu Yang	80
Prabha Singh	277	Nancy J.Tray	74	Jesse X.Yang	113
Rishi Singh	149	Carlos A.Tristan	75	Mu Yang	530
Tania A. Singh	276	Lauren E.Troxel	572	Peter J.Yang	445
Jennifer Sipics	150	Megan Truitt	175	Zhongjia Yang	158
Elizabeth A. Slagle	437	Alice (Yu-Ting) Tsai	76	Raphael Yao	238
Glenda N. Smiley	521	Ugochi J.Ukegbu	525	Victoria Yao	159
Andrew L. Smith	438	Sefanit A.Urgessa	282	Mikael Yisrael	212
Stephanie H. Sockbeson	325	Muthiah Vaduganathan	480	Anne J.Yoon	300
Tanuj K. Sood	151	Carla V.Valenzuela	77	Sloane S.Yu	332
Natalie M. Sorbello	278	Anita M.Valles	330	Kristy Yuan	446
Robert M. Sorbello	580	Mamata Venepally	78	George S.Zaidan	160
Edgardo Sosa	152	Tess L.Veuthey	382	Ibardo Zambrano	482
Melanie S. Spoor	209	Latrice D.Vinson	383	Yousef Zarbalian	333
Garima Srivastava	173	Shaleen N.Vira	283	Bixi Zeng	81
Michael Stockman	234	Kristin P.Viswanathan	5	Jaime L.Zerhusen	531
John T. Stranix	439	Lavanya Viswanathan	93	Helen Zhang	532
Aaron F.Summers	326	Steven J.Voskanian	526	Katherine H.Zhang	164
Lakeisha E.Summers	70	Jyothi Vynatheya	384	Richard L.Zhang	288
Di Sun	108	Yaffa D.Wagschal	442	Yuan (Chelsea) Zhang	213
Gjun Sun	10	Brigham C.Walker	385	Yi Zhao	533
Tarangi D.Sutaria	377	Erin Walsh	109	Yin Zheng	334
Mary Beth Sutter	279	Leo M.Walton	386	Victor Zhu	182, 214
Elizabeth A.Swedo	378	Lyn Wancket	51	Xiaoqi Zhu	289
James R.Swetnam	327	David A.Wang	284	Amy R.Zolko	573

Index of Educational Institutions of Participants

Abington Friends School	529
Abington Senior High School	55
Academy of the Holy Cross	229
Albert Einstein High School	282
Albright College	51
Alderson-Broaddus College	195
Allegheny College	191, 400
American University	69, 354, 504
Amherst College	40, 92
Atholton High School	523
Barnard College	106, 521
Barrie School	143
Baylor College of Dentistry	295
Benjamin Banneker Academic High School	99
Bethesda-Chevy Chase High School	314, 364
Bethune-Cookman College	309
Biola University	316
Bishop McDevitt High School	236
Boston University School of Medicine	403, 554
Bowdoin College	420
Brandeis University	228
Brigham Young University	227, 231, 430
Brigham Young University, Idaho	474
Brown University	127, 135, 268, 412, 419, 429, 449, 462
Bucknell University	492
C.K. McClatchy High School	252
Caesar Rodney High School	344
California Academy of Mathematics and Science	34, 97, 114
California State University, Fresno	75
California State University, Northridge	58, 308
Carleton College	513
Carnegie Mellon University	17, 132, 373, 436, 459
Case Western Reserve University	230, 234
Catholic University of America	32, 564
Centennial High School	362, 448, 479, 498, 532
Centre College	449, 462
Chamblee High School	522
Charles E. Smith Jewish Day School	7, 9, 156, 249, 353, 371, 390
Cheltenham High School	31
Claflin University	70
Clark Atlanta University	383
Colby College	172
Colgate University	23

College of Saint Mary	73
College of the Holy Cross	278
College of William and Mary	162, 327, 361, 363, 551
Colorado College	574
Colorado State University	146, 281
Colorado State University College of Veterinary Medicine	209
Columbia University	117, 189, 296, 418, 470
Cornell University	115, 199, 216, 297, 322, 332, 341, 395
Damascus High School	13
Dartmouth College	138, 343, 378
Davis and Elkins College	531
Delaware State University	331
DeMatha Catholic High School	271
Dickinson College	576
Drexel University	240
Drexel University College of Medicine	107
Duke University	102, 206, 346, 421, 497, 502
East Carolina University	359, 560
Eleanor Roosevelt High School	12, 173
Elizabethtown College	171
Emory University	154, 280, 306, 443, 517
Fairfax High School	225
Fairmont State University	328
Ferris State University	36
Fort Lewis College	301
Franklin and Marshall College	528
Gaithersburg High School	8, 29, 96, 151, 359, 370, 377
George C. Marshall High School	415
George Washington University	16, 79, 86, 101, 192, 261, 397
George Washington University School of Medicine	411, 422
Georgetown Day School	25, 30
Georgetown University	65, 93, 133, 412, 428, 450
Glendale Community College	330
Glenelg Country School	11, 53
Goucher College	524
Grambling State University	340
Grand Blanc High School	52
Groton School	254
Hammond High School	374
Harvard College	424
Harvard School of Public Health	269, 272
Harvard University	241, 313
Haverford College	315, 490

Hayfield Secondary	149
Heights School	484
Henry M. Gunn Senior High School	503
Holton-Arms School	104, 320
Howard High School	501
Howard University	100, 240
Howard University College of Medicine	431
Howard University College of Pharmacy	571
Illinois Institute of Technology	66
Iowa State University	124
Ithaca College	339
James Madison University	62
Johns Hopkins School of Medicine	125
Johns Hopkins University	5, 74, 116, 251, 258, 265, 388, 461, 509, 540, 569
Judson High School	380
Lafayette College	161
Landon School	1
Lawrence High School	555
Loma Linda University School of Medicine	105
Los Alamitos High School	490
Louisiana State University	333
Lower Merion High School	181
Loyola College in Maryland	37
Macalester College	386, 495
Maret School	299
Martin Luther King Academic Magnet	77
Massachusetts Institute of Technology	44, 160, 167, 169, 382, 413, 460
McDaniel College	404, 453
McGill University	217
Meade Senior High School	218
Medical College of Georgia	550
Melvin J. Berman Hebrew Academy	357
Michigan State University	49
Middlebury College	566
Midwood High School	142
Mission San Jose High School	288
Mississippi State University	148, 394
Montgomery Blair High School	19, 33, 46, 80, 159, 164, 213, 235, 246, 253, 257, 290, 367, 391, 483
Montgomery College	335
Morehouse College	368, 455
Morgan State University	562
Moscow State University	558
Mount Hebron High School	511

Mount St. Mary's University	519
Mt. Sinai School of Medicine	223
Muhlenberg College	360, 426
National Cathedral School	119, 170
New York College of Osteopathic Medicine	542
New York Medical College	45, 109, 512, 526, 567
New York University	283
North Carolina Agricultural and Technical State University	356
North Carolina Central University	534
North Carolina State University	131, 452
North Springs High School	510
Northeastern State University	302
Northeastern University	137, 537
Northern Michigan University	473
Northfield Mount Hermon School	182, 214
Northwestern University	129, 238, 243, 273, 407, 480, 547
Notre Dame Preparatory School	516
Oberlin College	264, 527
Ohio State University	72, 242, 259
Ohio State University College of Medicine and Public Health	98
Palm Beach Gardens High School	499
Palos Verdes Peninsula High School	153
Peddie School	212
Pennsylvania State University	266, 366, 442, 544, 561
Pennsylvania State University College of Medicine	91
Pikesville High School	435
Plymouth Whitemarsh High School	514
Princeton University	26, 94, 95, 111, 176, 337, 385, 469
Radford University	10
Regis High School	188
Rheinische Friedrich Wilhelms Universitaet	434
Rice University	121, 130, 221, 250, 303, 425, 445
Richard Montgomery High School	108, 128, 204, 233, 338, 447
Riverdale Country Day School	525
Royal Palm Beach Community High School	59, 63
Rush Medical College	68
Rutgers College	263
Rutgers University	56, 352
Salisbury University	175
San Jose State University	200
Sidwell Friends School	48, 387, 548
Simpson College	274
Skidmore College	482

Smith College	310, 442
Southern Illinois University	557
Springbrook High School	174, 294
St. Albans School	6, 50, 118, 535
St. John's University	538
St. Mary's College of Maryland	145, 198
St. Stephen's and St. Agne's School	104
Stanford University	24, 90, 180, 256, 285
State University of New York at Albany	152
State University of New York Upstate Medical University	570
Stevens Institute of Technology	150
Stone Ridge High School	57, 210
Stone Ridge School of the Sacred Heart	35
Suncoast High School	183, 342, 440
Swarthmore College	136, 530
Takoma Academy	355
Thomas Jefferson High School for Science and Technology	113, 182, 214, 219
Thomas S. Wootton High School	3, 28, 110, 184, 270, 298, 369, 392
Towson University	178
Tufts University	468
Tufts University School of Medicine	326
Tulane University	486, 489
Unionville High School	211
University of Alabama	541
University of Arizona	41, 536
University of Arkansas	317
University of California, Berkeley	179
University of California, Davis	187
University of California, Irvine	423
University of California, Los Angeles	64, 87, 185, 336, 405, 406
University of California, Los Angeles, School of Dentistry	300
University of California, Los Angeles, School of Public Health	83
University of California, San Diego	76
University of California, San Francisco	291
University of Chicago	164
University of Colorado	15, 432
University of Connecticut	345
University of Connecticut School of Medicine	190
University of Delaware	491
University of Denver	39
University of Florida	4, 122, 220
University of Houston	311
University of Illinois	51, 267, 414

University of Iowa	205, 553
University of Kansas	208
University of Maine	325, 515
University of Maryland	43, 51, 78, 81, 85, 89, 103, 112, 120, 134, 157, 166, 186, 196, 226, 232, 255, 275, 277, 279, 292, 389, 402, 410, 416, 446, 458, 465, 507, 539, 543, 545, 556, 563, 565, 573, 575, 578
University of Maryland Eastern Shore	451, 454, 456, 467, 475, 518
University of Maryland, Baltimore County	141, 168, 276, 365, 472, 500, 508, 533, 546, 572
University of Massachusetts	549
University of Massachusetts Dartmouth	559
University of Medicine and Dentistry of New Jersey	144
University of Michigan	21, 71, 139, 260, 304, 444
University of Michigan School of Public Health	84
University of Minnesota	437
University of New Hampshire	237
University of New Mexico	329, 372
University of Newcastle upon Tyne, England	262
University of North Carolina	38, 155, 163, 293, 324, 476, 478
University of North Texas Health Science Center	457
University of Notre Dame	496
University of Oklahoma	42
University of Oxford	82
University of Pennsylvania	67, 140, 305, 384, 409, 417, 463, 568
University of Puerto Rico	60, 215, 312
University of Puerto Rico School of Medicine	123
University of Rhode Island	399
University of Richmond	318
University of Rochester	224, 381, 401, 493
University of South Florida	245
University of Southern California	207
University of Tennessee	287, 427
University of Texas at Austin	18, 441, 485
University of Toledo	438, 579
University of Virginia	201, 323, 348, 351, 408, 439, 466, 506
University of Washington	247, 350
University of Wisconsin	177, 286, 349
Ursinus College	193
Vanderbilt University	321, 487, 520
Virginia Polytechnic Institute and State University	20, 22, 126, 202, 222, 488, 549
W.T.Woodson High School	494
Walt Whitman High School	165, 248, 289
Walter Johnson High School	14, 244, 347
Warwick High School	376

Washington College	396, 477
Washington University, St. Louis	47, 319, 334, 379, 471
Wayne State University	375
Wellesley College	307
West Shore Junior-Senior High School	552
Western High School	505
Whitman College	197, 239
William Mason High School	284
Williams College	147, 194, 433
Winston Churchill High School	33, 54, 88, 158, 577, 580
Wittenberg University	393
Woodrow Wilson Senior High School	61
Xavier University of Louisiana	349
Yale University	2, 203, 358, 398, 464, 481
Yorktown High School	27

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